

NOV 10 2005



UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
PROGRAM PLANNING AND INTEGRATION
Silver Spring, Maryland 20910

To All Interested Government Agencies and Public Groups:

Under the National Environmental Policy Act, and environmental review has been performed on the following action.

TITLE: Programmatic Environmental Assessment for Land Acquisition Projects Funded through the Coastal and Estuarine Land Conservation Program, Fish and Wildlife Conservation Act, and the Coastal Zone Management Act's National Estuarine Research Reserve System

LOCATION: Coastal environments of the United States and its trust territories with federally-approved coastal management programs and/or National Estuarine Research Reserves (NERR) under the Coastal Zone Management Act (CZMA) of 1972, as amended.

SUMMARY: The National Oceanic and Atmospheric Administration (NOAA) has prepared this Programmatic Environmental Assessment (EA) to assess the environmental impacts associated with the implementation and distribution of grant funds under the Coastal and Estuarine Land Conservation Program (CELCP) and the Fish and Wildlife Coordination Act. The purpose of the CELCP is to provide financial assistance to eligible coastal states to acquire and protect important coastal and estuarine areas that have significant conservation, recreation, ecological, historical, or aesthetic values, or that are threatened by conversion from their natural or recreational state to other uses. All states and territories that have approved coastal zone management programs and NERR sites under the provisions of the CZMA are eligible to receive appropriated funds. Authorized uses of CELCP funding include development of CELCP plans to carry out the program, administrative costs, land acquisition from willing sellers, temporary land stewardship costs, and additions to NERR sites. CELCP funds may not be used for construction, acquiring lands that will completely restrict access to certain persons, meeting mandatory mitigation requirements, or for active recreation.

Two alternatives are available to NOAA pertaining to the CELCP: (1) approve state CELCP plans and financial assistance awards for land acquisition projects under the CELCP, the CZMA and/or FWCA that meet national program criteria and implement priority acquisition projects that conserve coastal and estuarine lands with significant environmental values; and (2) the no action alternative: do not approve state CELCP plans or fund financial assistance awards. NOAA's preferred alternative is to provide CELCP funds to eligible applicants to cover projects that meet programmatic requirements. Administratively, NOAA can withhold funding for, or deny CELCP plans and proposals that do not meet the programmatic purposes or guidelines of CELCP or NERR management plans. In addition, NOAA can place conditions on project applications and withhold funds until all requirements are met. Conditional approval

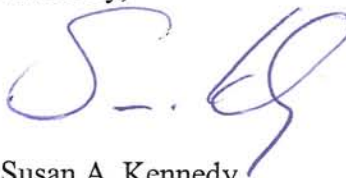


enables NOAA to work with an applicant to make necessary changes to a plan, a grant application, or to satisfy additional National Environmental Policy Act, Endangered Species Act, or other environmental requirements before an action can occur. NOAA finds that this alternative will have a beneficial effect on the nation's coastal ecosystem because it will increase the amount of coastal lands conserved for open space, important natural functions, and low-impact public access activities, as identified and prioritized by states.

RESPONSIBLE OFFICIAL: Charles W. Challstrom, Acting Assistant Administrator, National Ocean Service, 1305 East-West Highway, Silver Spring, MD 20910 (301-713-3074, Ext. 154).

The environmental review process led us to conclude that this action will not have a significant effect on the human environment. Therefore, an environmental impact statement will not be prepared. A copy of the finding of no significant impact including the supporting environmental assessment is enclosed for your information. Please submit any written comments to me in Room 15625, SSMC3, NOAA Strategic Planning Office, 1315 East-West Highway, Silver Spring, MD 20910

Sincerely,



Susan A. Kennedy
Acting NEPA Coordinator


Enclosures



UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL OCEAN SERVICE
Silver Spring, Maryland 20910

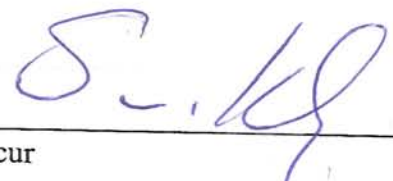
OCT 26 2005

MEMORANDUM FOR: Susan A. Kennedy
Deputy Director
Strategic Planning Office

FROM: Charles W. Challstrom 
Acting Assistant Administrator

SUBJECT: Finding of No Significant Impact on the Programmatic
Environmental Assessment for Land and Water Acquisition
Projects Funded Through the Coastal and Estuarine Land
Conservation Program, Fish and Wildlife Conservation Act, and
the Coastal Zone Management Act's National Estuarine Research
Reserve System

Based on the subject Programmatic Environmental Assessment, I have determined that no significant environmental impacts will result from the proposed action. I request your concurrence in this determination by signing below. Please return this memorandum for our files.

1.  _____ 11/10/05
I concur Date

2. _____
I do not concur Date

Attachments



***PROGRAMMATIC ENVIRONMENTAL ASSESSMENT
FOR
LAND AND WATER ACQUISITION PROJECTS
FUNDED THROUGH THE:***

***COASTAL AND ESTUARINE LAND CONSERVATION PROGRAM,
FISH AND WILDLIFE CONSERVATION ACT, AND THE
COASTAL ZONE MANAGEMENT ACT'S
NATIONAL ESTUARINE RESEARCH RESERVE SYSTEM***

OCTOBER 2005

***Office of Ocean and Coastal Resource Management
National Ocean Service
National Oceanic and Atmospheric Administration
U.S. Department of Commerce***



DESIGNATION: Environmental Assessment

TITLE: Programmatic Environmental Assessment for Land and Water Acquisition Projects Funded Through the Coastal and Estuarine Land Conservation Program, Fish and Wildlife Conservation Act, and the Coastal Zone Management Act's National Estuarine Research Reserve System

ABSTRACT: This environmental assessment is prepared pursuant to the National Environmental Policy Act (NEPA) 42 U.S.C. 4321 et seq. to assess the environmental impacts associated with the implementation of the Coastal and Estuarine Land Conservation Program (CELCP) at 16 USC 1456d, a congressionally-authorized and funded multi-year program, and of land conservation projects funded under the authority of the Coastal Zone Management Act (CZMA) and Fish and Wildlife Coordination Act (FWCA). The purpose of the CELCP is to provide financial assistance to eligible coastal states to acquire and protect important coastal and estuarine areas that have significant conservation, recreation, ecological, historical, or aesthetic values, or that are threatened by conversion from their natural or recreational state to other uses. The Secretary of Commerce has delegated authority to the National Ocean Service (NOS) within the National Oceanic and Atmospheric Administration (NOAA) for implementing the CELCP. The Office of Ocean and Coastal Resource Management (OCRM) within NOS is responsible for administering the program.

For purposes of this programmatic environmental assessment, the proposed action is OCRM's implementation of the CELCP as a new grant program. OCRM has developed program guidelines, will approve state CELCP plans that identify and prioritize CELCP lands, and distribute grants for acquisition of the CELCP lands. The practical effect will be to increase the amount of coastal lands conserved for open space, important natural functions, and low-impact public access activities, as identified and prioritized by states. Between 2002 and 2004, Congress has provided funds earmarked for specific CELCP projects. OCRM has distributed these funds, while conducting a separate NEPA review for each project. This programmatic EA will assist OCRM with meeting the NEPA requirements through a programmatic review of the grant program and its overall impacts. Grants will continue to be reviewed individually by Program Officers for potential significant impacts to the human environment, however, it is anticipated that individually and cumulatively they will qualify as categorical exclusions under NAO 216-6.

Based on a review of the subject and information, NOAA finds that implementation of the CELCP will not result in any significant environmental impacts different from those analyzed in the attached environmental assessment.

LEAD AGENCY: U.S. DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
National Ocean Service

CONTACT: John King, Chief, Coastal Programs Division
NOS/OCRM
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LIST OF ACRONYMS

ADA	Americans with Disabilities Act
C&SF	Central and Southern Florida (Projects)
CE	Categorical Exclusion
CELCP	Coastal and Estuarine Land Conservation Program
CNMI	Commonwealth of the Northern Mariana Islands
CoBRA	Coastal Barriers Resources Act
CZMA	Coastal Zone Management Act
EA	Environmental Assessment
EFH	Essential Fish Habitat
EIS	Environmental Impact Statement
ESA	Endangered Species Act
FEIS	Final Environmental Impact Statement
FLP	Forest Legacy Program
FWCA	Fish and Wildlife Coordination Act
FY	Fiscal Year
LWCF	Land and Water Conservation Fund
NAO	NOAA Administrative Order
NEPA	National Environmental Policy Act
NERR(s)	National Estuarine Research Reserve(s)
NMFS	NOAA Marine Fisheries Service
NFIP	National Flood Insurance Program
NOAA	National Oceanic and Atmospheric Administration
NOS	National Ocean Service (NOAA)
NPS	National Park Service
OCRM	Office of Ocean and Coastal Resource Management (NOAA)
PEA	Programmatic Environmental Assessment
PAH	Polycyclic Aromatic Hydrocarbons
PCB	Polychlorinated Biphenyls
SAV	Submerged Aquatic Vegetation

EXECUTIVE SUMMARY

The proposed Federal action is the implementation of the Coastal and Estuarine Land Conservation Program (CELCP) at 16 USC 1456d, a congressionally-authorized and funded multi-year program, and of land conservation projects funded under the authority of the Coastal Zone Management Act (CZMA) and Fish and Wildlife Coordination Act. The purpose of the CELCP is to provide financial assistance to eligible coastal states to acquire and protect important coastal and estuarine areas that have significant conservation, recreation, ecological, historical, or aesthetic values, or that are threatened by conversion from their natural or recreational state to other uses. All states and territories that have approved coastal zone management programs and National Estuarine Research Reserve (NERR) sites under the provisions of the CZMA are eligible to receive appropriated funds. The Secretary of Commerce has delegated authority to the National Oceanic and Atmospheric Administration's (NOAA) Assistant Administrator for the National Ocean Service (NOS) to implement the CELCP.

The National Environmental Policy Act of 1969, as amended (NEPA) 42 USC 4321 et seq., requires Federal agencies to assess the environmental impacts of proposed major actions significantly affecting the quality of the human environment. NOS's implementation of the CELCP as a new grant program was considered a major Federal action which required NEPA review. Prior to approving and funding individual awards, an environmental review is required to meet the requirements of NEPA and other environmental/regulatory statutes. While Fiscal Year (FY) 2004 is the third year the CELCP has been administered by NOS's Office of Ocean and Coastal Resource Management (OCRM), for previous years' awards, OCRM has reviewed each individual award for compliance with NEPA using a checklist to assess environmental impacts. Due to the increase in funding for these types of projects, this Programmatic Environmental Assessment (PEA) is being prepared to assess the potential impacts of these projects cumulatively, and examines potential viable alternatives, including preferred and no-action alternatives.

In order to participate in a competitive funding process under the program, each eligible coastal state must develop a CELCP plan, in accordance with the requirements of statutory language and guidance developed by OCRM, which identifies the state's priority needs for land conservation. All funding for projects under the CELCP between FY 2002 and FY 2004 was earmarked for specific Congressionally-directed projects. Applications for funding have come directly from the agencies and organizations named by Congress as intended recipients. Therefore, OCRM has not yet conducted a competitive review process to select projects nominated by states for funding under this program, as envisioned and outlined in the program's guidelines. However, state coastal programs have received CZMA awards and been encouraged to develop CELCP plans in the event that CELCP funds are made generally available for competitive grants.

This PEA indicates that the overall implementation of the CELCP program at the national level, as well as NOAA's approval of individual state program plans, will produce environmentally positive benefits, as the acquisitions are designed to preserve and protect lands with important ecological, historical, recreational, and aesthetic values for conservation

purposes. The program provides flexibility to states to protect important and threatened lands as a complement to their ongoing efforts under applicable state and local authorities, and to target future growth and development along the coast to suitable areas.

The conclusion of this PEA is that implementation of the CELCP is not a major federal action having a significant impact on the human environment. Therefore, a Finding of No Significant Impact is appropriate.

1. INTRODUCTION

1.1 Background

The Departments of Commerce, Justice, and State Appropriations Act of 2002 (Public Law 107-77), directed the Secretary of Commerce to establish a Coastal and Estuarine Land Conservation Program (CELCP) for

the purpose of protecting important coastal and estuarine areas that have significant conservation, recreation, ecological, historical, or aesthetic values, or that are threatened by conversion from their natural or recreational state to other uses, giving priority to lands which can be effectively managed and protected and that have significant ecological value.

The law further directed the Secretary to issue program guidelines for the CELCP delineating the criteria for granting awards, and to distribute funds in consultation with the State Coastal Zone Management Program Managers or the Governors' designated representatives, based on demonstrated need and ability to successfully leverage funds. Grants under this program require a 100 percent match of the Federal funds from other participating sources, unless such requirement is specifically waived by law. The authority for this program is codified at 16 U.S.C. 1456d.

Additional authority to fund the acquisition of coastal property is found under the Coastal Zone Management Act (CZMA) under Section 315 (NERR), codified at 16 U.S.C. §1461. Section 315 authorizes NOAA to make grants to coastal states, "for purposes of acquiring such lands and waters, and any property interests therein, as are necessary to ensure the appropriate long-term management of an area as a national estuarine reserve" 16 U.S.C. §146a(e)(1)(A)(i). Appropriations law gave the National Oceanic and Atmospheric Administration (NOAA) authority to acquire some select sites under Section 2 of the Fish and Wildlife Conservation Act (FWCA). Due to the similarity of impacts associated with acquisition, this Programmatic Environmental Assessment (PEA) addresses all issues for land acquisition with the exception of designation of new NERR sites (i.e., first time acquisition, development of research plans, and establishment of a Reserve facility).

1.2 Authorized Use of CELCP Funding

The purpose of the CELCP is to protect important coastal and estuarine areas with significant values or that are threatened by conversion, and that can be effectively managed and protected. CELCP funds are limited to the uses described below. The CELCP guidelines also contain limitations on the use of the funds in order to ensure that activities funded under CELCP are (1) consistent with long-term conservation; and (2) provide for public benefit.

CELCP funds may be used for:

- Plans: Development of state CELCP plans to carry out the program;
- Administrative costs: Administration of the program, including such direct or indirect costs as salaries and benefits of staff directly involved in program planning, implementation, project review, appraisals, title work, and other costs related to acquisition, etc.;
- Acquisition: Acquisition of properties or interests in properties from willing sellers, provided that the terms and conditions will ensure that the property will be administered for conservation in perpetuity; and
- Temporary land stewardship: Certain initial costs for land stewardship, not to exceed five percent of the award and not to exceed three years or the duration of the award period, to allow for signage, public safety, or other stewardship purposes.

CELCP funds may not be used for:

- Construction: Construction of buildings, boat launching facilities, docks or piers, shoreline armoring, or other facilities;
- Restricted Access: Acquisition of lands, or interests in lands, that completely restrict access to specific persons (e.g. non-residents of a community);
- Mitigation: Acquisition of lands, or interests in lands, to comply with mandatory or compensatory mitigation for recent or pending habitat losses resulting from the actions of agencies, organizations, companies or individuals; and
- Active Recreation: Acquisition of land for active recreation, such as sports facilities, water parks, playgrounds, or similar uses.

To be eligible for funding under the CELCP, a project must:

- Be located in a coastal or estuarine area included within a state's approved CELCP plan and meet the stated purposes of the CELCP, or in the absence of a plan, be located in a coastal watershed;
- Be held in public ownership (fee simple or conservation easements) and provide conservation in perpetuity; and
- Provide for access to the general public or other public benefit, as appropriate, and be consistent with resource protection and a state's federally-approved CZM program.

1.3 NERRs

This PEA covers acquisition awards for land to be included in a NERR site that does not involve subsequent construction projects, such as a new research facility or an administrative building. As part of the Reserve designation process, an Environmental Impact Statement (EIS) and Management Plan are prepared for each proposed NERR prior to its designation. Following designation, a coastal state may request a supplemental acquisition and/or development award(s) for acquiring additional property interests identified in the NERR management plan as necessary to strengthen protection of key land and water areas and to enhance long-term protection of the area for research and education. Awards for the acquisition of lands or waters, or interests

therein, for any one reserve may not exceed an amount equal to 50 percent of the costs of the lands, waters, and interests therein, or \$5,000,000, whichever amount is less. There is an exception when the financial assistance is provided from amounts recovered as a result of damage to natural resources located in the coastal zone. In this case, the assistance may be used to pay 100 percent of all actual costs of activities carried out with this assistance, as long as such funds are available.

2. SCOPE OF PROGRAMMATIC ENVIRONMENTAL ASSESSMENT

This PEA addresses NEPA compliance at the programmatic level. It covers three sets of actions: (1) issuance of guidelines to implement the program; (2) NOAA approval of state CELCP plans; and (3) approval and disbursement of financial assistance awards for land conservation projects selected for funding under the program. This assessment also covers additional purchases of property for the NERR Program under the CZMA, as well as special projects identified by Congress under Section 2 of the FWCA for land acquisition to further conservation goals because of the similar nature and impact of these activities.

2.1 Issuance of Program Guidelines

The FY 2002 Appropriations Act for the Departments of Commerce, Justice, State and Related Agencies directed the Secretary to issue guidelines for the CELCP, delineating the criteria for grant awards. The program guidelines establish the eligibility, procedural, and programmatic requirements for participation in the CELCP, and are available at: <http://www.ocrm.nos.noaa.gov/pdf/CELCPfinal02Guidelines.pdf>. The guidelines delineate the criteria for all financial assistance awards under the CELCP, including guidance on procedures and criteria for eligible coastal states to develop a state CELCP plan; identifying and ranking qualified projects within the state; and nominating projects to a national competitive selection process annually. The guidelines also delineate procedures and criteria for NOAA to use when conducting peer review and selecting projects at the national level. NOAA issued final guidelines in June 2003. Issuance of guidelines for the program was considered a Categorical Exclusion (CE) under NEPA because they are administrative and financial in nature (NAO 216-6 6.03.c.3 (i)).

2.2 Approval of CELCP Plans

The first three years of CELCP funding were earmarked (i.e., funding is directed at specific projects to known recipients) for projects that Congress identified as being important and consistent with the goals of the program. Consequently, these grants have been awarded on a non-competitive basis while coastal states develop a selection process for future proposals. It is unknown at this time when the program will receive competitive funding, in addition to or in lieu of earmarked funding.

In order to participate in the competitive project selection process, coastal states are required to develop, and submit to NOAA for approval, a CELCP plan. The plan must provide an assessment of the state's priority conservation needs and clear guidance for nominating and selecting land conservation projects. Plans are intended to be fairly simple and concise, and can

be drawn from other planning and conservation products prepared in the state or region, such as regional, state or local watershed protection, restoration or land conservation plans. These can be incorporated either in part or in whole, by reference into the overall CELCP plan. State plans are required to be developed through a public process that includes a public review and comment period. The Assistant Administrator for NOAA Ocean Services and Coastal Zone Management or his/her designated officer, is the approving official for plans submitted to NOAA under this program. States must update their plans at least once every five years to reflect changes that have taken place within the state or region and submit the updated plans to OCRM.

State CELCP plans must include the following information:

- A map or description of the geographic extent of coastal and estuarine areas within the state, as defined for the purposes of the CELCP;
- A description of the types of lands or values to be protected through the program and the need for conservation through acquisition;
- Identification of "project areas" that represent the state's priority areas for conservation, including areas threatened by conversion, based on state and national criteria (listed below) for the program;
- A description of existing plans, or elements thereof, that are incorporated into this plan;
- A list of state or local agencies, or types of agencies, that are eligible to hold title to property acquired through the CELCP;
- A description of the state's process for reviewing and prioritizing qualified proposals for nomination to the national selection process. The vetting process should, at a minimum, involve representatives from the state's coastal zone management program, NERR(s), and any other agencies or entities that the state considers appropriate; and
- A description of the public involvement and interagency coordination that occurred during the development of the plan.

State plans must address the following national criteria for projects and project areas as they relate to the purpose of the CELCP:

- Protect important coastal and estuarine areas that have significant conservation, recreation, ecological, historical, or aesthetic values, or that are threatened by conversion from their natural or recreational state to other uses;
- Give priority to lands which can be effectively managed and protected and that have significant ecological value;
- Directly advance the goals, objectives, or implementation of the state's coastal management plan or program, NERR management plans approved under the CZMA, national objectives of the CZMA, or a regional or state watershed protection plan involving coastal states with approved coastal management plans; and
- Be consistent with the state's approved coastal management program.

During FY 2003, NOAA was able to provide some financial assistance to states under the Coastal Zone Management Program, ranging from \$20,000 to \$40,000 per state, to develop a CELCP plan if they so chose to participate. It is anticipated that these plans will be submitted

during FY 2004 and FY 2005 for review and approval, with approval being considered as CE's from further NEPA review and compliance as they will become an administrative management tool.

2.3 Financial Assistance Awards for CELCP Projects

The approval of financial assistance awards and disbursement of funds under the authority of the CELCP, NERRS and FWCA are federal activities subject to authorities such as NEPA, Endangered Species Act (ESA), the federal consistency provisions of the CZMA, the Essential Fish Habitat (EFH) provisions of the Sustainable Fisheries Act, Coastal Barrier Resources Act, National Historic Preservation Act, and the Americans with Disabilities Act (ADA). As the federal funding agency, NOAA is responsible for complying with these authorities before disbursing funds. Once this PEA has been completed, all CELCP grants will be categorically excluded. However, potential impacts of individual projects will be reviewed on a case-by-case basis during the annual grant review process to ensure that any significant environmental issues are identified; and consultation among relevant agencies, programs and the public has occurred. As part of the application for each project, applicants must complete a Project Application Checklist (see Appendix A), which will be used to determine whether a more detailed analysis of the environmental impacts of the proposed action is required, such as a project-specific EA or EIS. The checklist was adapted in coordination with the Strategic Planning Office from a checklist used by NOAA for all construction and land acquisition type projects funded under section 306A of the CZMA and NOAA's Non-Construction NEPA checklist. As part of the program's guidance, applicants are encouraged to identify potential issues at the earliest possible time and consult with the relevant programs or agencies prior to submitting a project application.

OCRM prepared a Final EIS (FEIS) on the long-term implementation of the comprehensive coastal zone management programs submitted for approval by each of the eligible coastal states and territories. Each state and territory coastal management program established the boundaries of the coastal area within which the program applies; described the organizational structure to implement the program; and provided a set of state-wide policies applicable to all state and federal agencies that manage resources along the state or territory's coastline. The information in these FEIS's is relevant to this PEA because the types of activities authorized under the CELCP must be consistent with the CZMA and the approved coastal management programs. Therefore, the FEIS for each participating coastal state and territory approved coastal management program and associated environmental assessments on amendments to those approved programs are incorporated by reference into this EA. Some CELCP land conservation activities support federally-approved NERRs. As part of the designation process, an FEIS was prepared for each Reserve to determine the overall impact of implementing the Reserve's management plan, including proposed plans to acquire and manage lands within the Reserve's core and buffer areas. These FEISs are also incorporated by reference into this PEA. However, NOAA may conduct additional assessments on specific land acquisition projects should circumstances warrant more intensive review.

The grant review and awarding process takes into consideration the sensitive nature and timing of land acquisition projects. Some land acquisition projects under CELCP, the NERRS or the FWCA are, or will be, funded in phases as multi-year projects due to their size, or because

they are comprised of multiple parcels. At the time of initial project review, some grant applications that have been identified for funding do not contain all the required information, and are conditioned until all information has been provided to and reviewed by NOAA. This situation where complete information, such as site selection, is not available may be the result of sensitive, on-going negotiations.

3. PURPOSE

This PEA considers the environmental impacts of implementation of a new grant program that will provide funds to states with an approved Coastal Management Program to acquire lands for preservation and protect lands with important ecological, historical, recreational, and aesthetic values for conservation purposes. The purpose of the CELCP program is to provide funding flexibility to states to protect important and threatened coastal lands as a complement to their ongoing efforts, under applicable state and local authorities, and to target future growth and development along the coast to suitable areas. In addition, the implementation of the CELCP will allow states with CELCP plans the opportunity to participate in the program should non-earmarked funds become available.

4. NEED

4.1 Developed and Developing Coasts – The Need for Conservation

An expanding population and associated development are increasing stress on coastal land and resources, resulting in depleted fisheries, lost habitat, degraded water quality, and increased chemical and sediment runoff. These conditions are found throughout the coastal United States, and are among the most challenging problems facing coastal resource managers. While the coastal zones of the United States are managed better than they were prior to the passage of the CZMA 32 years ago, population growth and development remain elevated and appear to continue unabated in many areas. Population density in coastal areas is more than three times greater than in inland areas. (Preliminary Report of the U.S. Ocean Commission, 2004) In 2002, over 148 million people lived in coastal counties, an increase from 95 million in 1960 and 120 million people in 1980. The population living in the coastal area is expected to increase by 11 million people in 2008. In 2002, coastal counties contained 52 percent of the nation's total housing supply. (Crossett, 2004)

Land development, urbanization and other forms of habitat modification directly affect ecosystem health. Direct and indirect pressures from development place a strain on fragile environmental resources such as wetlands, estuaries, coastal vegetated uplands, bluffs and beaches. Land development can cause changes in freshwater delivery to an ecosystem, and runoff resulting from more paved roads and other impermeable surfaces can increase the spread of contaminants. In addition, continued unsustainable use of resources can degrade estuarine and marine ecosystems. Fragmentation jeopardizes the integrity of these systems, leaving only pockets of habitat remaining. Whole ecosystems may change or even disappear entirely. Between 1992 and 1997, more than 11 million acres of rural land in the United States were converted to developed use. (The Nature Conservancy, 8) This level of change costs communities nationwide billions of dollars in expenses to address polluted drinking water, air

quality, erosion control, and flood water issues as a result of increases in impervious land surface.

4.2 Benefits of Open Space

Open space preservation and conservation benefit both the environment and the economy. Protecting open space around population growth areas conserves watersheds and aquifers, helping ensure a clean supply of water for public use. Conservation easements and open space help protect migratory corridors for wide-ranging animals. Across the nation, parks, protected rivers, scenic lands, wildlife habitat, and recreational open space contribute to help support a \$502-billion tourism industry. Travel and tourism is the nation's third largest retail sales industry, and tourism is one of the country's largest employers, supporting seven million jobs, including 684,000 executive jobs. At present rates of growth, the tourism/leisure industry will soon become the leading U.S. industry of any kind. Outdoor recreation, in particular, represents one of the most vigorous growth areas in the U.S. economy. Much of this recreation is supported by public and private parks and open land. Popular outdoor recreational activities include hiking, camping, biking, birding, boating, fishing, swimming, skiing, and snowmobiling. According to the Outdoor Recreation Coalition of America, outdoor recreation generated at least \$40 billion in 1996, accounting for 768,000 full-time jobs and \$13 billion in annual wages. For example, in New Hampshire, the estimated annual value of open space to the state's total economy is \$8 billion; approximately 25 percent. New Hampshire's open space supports 100,000 jobs, with an annual contribution to state and local taxes of \$891 million, approximately 35 percent of all tax receipts. (The Trust for Public Land, 1)

4.3 Political Support for CELCP

Congress identified the continued degradation of the coastal environment as a major concern when they established the CELCP, indicating a need to assist state and local communities with a coastal land acquisition program that establishes coastal conservation partnerships among Federal agencies, State agencies, local governments, private landowners, and non-profit organizations. The Draft U.S. Commission on Ocean Policy Report recommended making the CELCP a permanent program under the CZMA and concluded that the program was "cost-effective, avoiding the much larger expense and scientific uncertainties associated with attempting to restore habitats that have been degraded or lost." (Preliminary Report of the U.S. Ocean Commission, 2004) In fact, across the United States, in the 2004 elections, American voters widely supported public funding for land conservation initiatives. In the November 2004 elections, voters in 120 communities in 26 states passed ballot measures to create \$3.25 billion in funding for land conservation, a passage rate of 77 percent. States with the most local conservation measures on the ballot were those offering matching funds to local governments, especially Florida (13), Massachusetts (11), Michigan (18), and New Jersey (44). An April 2004 poll conducted by the Trust for Public Land and The Nature Conservancy found that 65 percent of the nation's voters supported increasing taxes to fund state and local government programs to purchase land to "protect water quality, natural areas, lakes, river or beaches, neighbourhood parks, and wildlife habitat." (The Trust for Public Land, 4)

The CZMA's framework of management through partnerships with state and local governments provides a viable opportunity to administer and disperse Federal grants for coastal land conservation purposes. Under the CZMA's ecological and conservation values, it is the national policy to:

- protect fish and wildlife and their habitat in the coastal zone;
- protect estuaries to provide opportunities for long-term research, education, interpretation, and stewardship; and
- manage development to maintain and improve coastal water quality to protect and enhance natural resources and existing uses of those waters.

With respect to recreational, historical, and aesthetic values, the CZMA declares it is the national policy to:

- maintain and enhance environmentally sound public access to the coasts for recreation purposes;
- protect barrier islands within the coastal zone to provide protection against storm surge, wave damage and flooding, and maintain sand supplies and protect important recreational areas; and
- give priority consideration for coast dependent uses, including recreation; and
- assist in the sensitive preservation and restoration of historic, cultural, and aesthetic coastal features. (CZMA, section 303)

The CZMA and CELCP share land conservation and protection purposes. As part of original CZMA program development, coastal states and territories were required to identify priority areas for conservation purposes. Through continued program implementation, coastal states and territories have used the CZMA requirements for designating "Areas of Particular Concern", "Areas for Preservation and Restoration", and "Shorefront Access and Protection Planning" capabilities, as well as funds under section 306A of the CZMA, to purchase small properties and make improvements. However, to date, the magnitude of funding has been relatively limited, and funds are often in competition with other CZMA priorities. CELCP provides a potential targeted boost to acquire additional properties working through the CZM programs as well as other State agencies, local governments, and in partnership with non-governmental organizations.

5. ALTERNATIVES

As described above, the Federal actions under review in this PEA include the approval of financial assistance awards for land acquisition proposals under the CELCP, NERRS, or FWCA whether competitive or non-competitive in nature. NOAA's issuance of CELCP Guidelines will not be subject to further environmental analysis even though they constitute part of the implementation of the overall program because it has been determined to be a CE under NEPA due to its administrative and financial nature (NAO 216-6 6.03.c.3 (i)). Consequently, the analysis of alternatives focuses on the approval of state conservation plans and individual grant applications for land acquisition purposes.

5.1 Preferred Alternative – Approve state CELCP plans and financial assistance awards for land acquisition projects under the CELCP, the CZMA and/or FWCA that meet national program criteria and implement priority acquisition projects that conserve coastal and estuarine lands with significant environmental values. In some instances this may require conditional approval until all the details for the financial assistance can be finalized.

Coastal states with approved coastal zone management plans or NERRs are eligible to participate in the CELCP. Participation is voluntary, and states may choose to participate by developing a CECLP Plan for approval by NOAA. A designated state lead agency will be responsible for coordinating the establishment and implementation of the CELCP within each state.

Eligible coastal states that have submitted and received approval of their CELCP Plans may submit proposals to NOAA for federal funding under this program, provided that appropriated funds are available for competitive awards. The lead state agency may solicit, and include in its application, project proposals from other state agencies, local governments as defined at 15 CFR 24.3, or entities eligible for assistance under section 306A(e) of the CZMA (16 USC 1455a(e)), provided these other applicants have the authority to acquire and manage land for conservation purposes.

Section 2.6 of the Program Guidelines provides the general terms and conditions for ownership, use and long-term stewardship of lands acquired through the CELCP. As part of the project application, NOAA collects information about a project's eligibility; current or proposed uses of the property; ecological, historical, aesthetic, recreational or conservation values covered by the project; and applicability of Federal environmental statutes.

Under the CELCP, the title of property, or interests in property, will be held in perpetuity by the grant recipient or other appropriate public agency designated by the recipient. As a condition of any grant award, legal assurances will be made that the land will be held for conservation in perpetuity. Grant recipients will in most cases be state or local governments, but may also be interstate or other regional public entities. In rare cases, recipients may also be non-governmental organizations, if designated by Congress. If non-governmental organizations are to hold the property, NOAA would require either that the land be held under easement by a public agency, or that some similar legal and financial assurance be in place conserving the land in perpetuity for public benefit.

Pre-existing uses on the property must be identified as part of the project application. NOAA will review such uses for potential impacts and to determine whether they are consistent with the purposes of the CELCP. If a project is approved with pre-existing uses, such uses may not be expanded or converted to other uses without NOAA's prior approval.

If the property or interest in the land acquired with CELCP funds is sold, exchanged, divested, or converted to other uses that are inconsistent with the purposes for which it was acquired without NOAA's prior approval, the recipient must reimburse NOAA for the federal

share of funds received for the project in accordance with 15 CFR Part 24.31. Those funds would then be re-distributed in the CELCP grant process.

Appendix B lists the land acquisition projects that have been funded from FY 2002 to FY 2004 under the authority of the CELCP and the FWCA.

The NERR has conducted an inventory of land acquisition needs within the Reserve System. In any given year, depending on the availability of system-wide (non-earmarked) funds, NOAA selects projects nominated by its state partners for funding under Section 315 of the CZMA. In FY 2004, NOAA instituted a competitive selection process for these funds. In recent years, NOAA has also received Congressionally-directed funding to address land acquisition and construction needs in the Reserve system.

The preferred alternative is to continue to approve land acquisition proposals that meet the statutory and administrative requirements of the CELCP, Section 315 of the CZMA, and Section 2 of the FWCA. The majority of the plans and grant applications will fall under this alternative. The positive environmental consequences of the implementation of this alternative include permanent protection and conservation for land and water resources (habitats) identified through a rigorous planning and selection process. According to the purposes of the CELCP, these benefits will accrue to conservation, recreation, ecological, historical, and aesthetic values of coastal resources. Negative environmental consequences are expected to be minimal with minor, short-term economic impacts for localized areas to the tax base as property changes from private ownership to public ownership to serve local, state and national public needs. These will generally be offset by an increase in the property values of lands surrounding those sites that will remain undeveloped, or a reduction in the costs to government for resources not expended in association with proposed development (e.g., school, fire and ambulance service, septic, pollution reduction, etc.).

5.1.1 Conditional Approval of Plans and Acquisition Proposals

Administratively, NOAA can withhold funding for, or deny CELCP plans and proposals that do not meet the programmatic purposes or guidelines of CELCP or NERRS management plans. NOAA can place conditions on project applications and withhold funds until all requirements are met. Conditional approval enables NOAA to work with an applicant to make necessary changes to a plan, a grant application, or to satisfy additional NEPA, ESA, or other environmental requirements before an action can occur. This alternative action is frequently used as both a resource management and a financial management tool. While this may result in delays in the expenditure of funds, the end result is usually full approval after corrections or additional information is provided, or actions taken such as obtaining the appropriate permits.

Land acquisition projects are often complicated transactions, involving the need to bring together all the interested parties, conduct surveys and assessments, secure agreements, and close the project. As a result, some proposals will not have all the documentation needed at the time of grant submission. By conditionally approving projects through the administration of Special Award Conditions (SACs) on grants, NOAA is able to implement projects, particularly those directed by Congress, while still satisfying all legal and financial requirements. SACs provide

assurances that an applicant must satisfy all terms and conditions prior to the expenditure of part or all of the financial award.

5.2. No Action Alternative

5.2.1 General

The no action alternative was evaluated, but is not considered feasible or beneficial. Congress provided direct authority to the NERRS to acquire lands for Reserves, and directed the Secretary of Commerce to establish the CELCP. Congress continues to appropriate funding for land acquisition projects under the CELCP, NERRS and FWCA. Furthermore, failure to implement these actions could result in conversion or degradation of important coastal habitats and open space. State and local governments would lack an important and much-needed tool to provide long-term protection to ever-decreasing acreage of coastal habitats and have less ability to provide public access. Land acquisitions would be more *ad hoc* without the framework of the CELCP plans, the Federal funds would not be available to leverage other funds, and in many cases, key purchases associated with larger acquisition projects (greenways, reserves, etc.) may languish.

5.2.2 Specific Projects

Projects that do not meet all programmatic requirements and established criteria will not be approved unless appropriately modified. NOAA would deny a proposal that, for some reason, has exceptionally negative environmental impacts (e.g., on endangered species) or fails to meet the programmatic or legal requirements of the CELCP. Such occasions would be expected to be rare as they go through a selection process to prevent such possibilities.

5.2.3 Other Programs

If CELCP funds were not available, funding from other federal, state or non-governmental programs could be used to assist in the coastal conservation. Many of these programs target land acquisition for other purposes in support of other legislative mandates, such as protection of agricultural lands under the Farm Bill, conservation of coastal wetlands as habitat for migratory waterfowl, and incentives to preserve large tracts of productive forests. However, when viewed in total, these programs do not enable the conservation of many types of coastal lands that are considered significant for their contributions to comprehensive and integrated coastal zone management at the state and regional level. Approval of CELCP plans and land acquisition projects does not affect the implementation of these other programs, which are administered by other organizations under different legislative authorities.

6. AFFECTED ENVIRONMENT

6.1 General

The coastal environments of the United States and its trust territories are diverse, spanning more than 95,000 miles of 34 states and territories along the Atlantic and Pacific coasts, the Great Lakes, as well as Caribbean and Pacific islands. (See Table 1). Each shoreline mile is made up of beaches, dunes and islands, vegetated wetlands and forests, rural lands (farms and ranches), urban and industrial developments, parks and refuges, and roads and transportation facilities (harbors, railroads, airports). These coastal environments are described individually in more detail in the Final Environmental Impact Statement (FEIS) for each of the 34 approved state coastal management programs and 26 approved NERRs, which are incorporated by reference into this PEA. In addition, an overview of coastal regions and the status of remaining open space habitat and resources, as well as potential threats to those resources, such as filling, draining, development, invasive species, has been provided below. The information provided below has been encapsulated from Restore America's Estuaries and NOAA's *A National Strategy to Restore Coastal and Estuarine Habitat*.

6.2 Northeast Atlantic

For this discussion, the Northeast Atlantic is defined as the coastal region of the United States from the Maine-Canada border to the southernmost extent of the Chesapeake Bay. This region includes 103 estuarine and coastal drainage areas that cover several thousand square miles in area. Six of the ten most populous watersheds are found in the Northeast (Hudson/Raritan, Chesapeake Bay, Long Island Sound, Delaware Bay, Great South Bay and Massachusetts). The entire populations of Rhode Island, Connecticut, Delaware, and the District of Columbia fall within coastal counties, as does more than 90 percent of the populations of Maine, Massachusetts, New Jersey and Maryland, and at least 67 percent of the population of New Hampshire, New York and Virginia.

State/Territory	Shoreline Miles
Alabama	607
Alaska	33,904
American Samoa	126
California	3,427
Connecticut	618
Delaware	381
Florida	8,426
Georgia	2,344
Guam	110
Hawaii	1,052
Illinois (not participating)	63
Indiana	45
Louisiana	7,721
Maine	3,478
Maryland	3,190
Massachusetts	1,519
Michigan	3,224
Minnesota	189
Mississippi	359
New Hampshire	131
New Jersey	1,792
New York	2,625
North Carolina	3,375
Northern Mariana Islands	206
Ohio	312
Oregon	1,410
Pennsylvania	140
Puerto Rico	700
Rhode Island	384
South Carolina	2,876
Texas	3,359
U.S. Virgin Islands	175
Virginia	3,315
Washington	3,026
Wisconsin	820
Total Shoreline Miles	95,429

The primary estuarine habitat types found within the Northeast Atlantic region include tidal marshes, submerged aquatic vegetation (SAV), diadromous fish corridors, coastal embayments, shellfish beds, beaches and dunes, intertidal flats, salt ponds and salt panes, and rocky shores and cobble beaches.

A significant portion of the coastal habitats within the northeast have been altered, degraded or destroyed by anthropogenic activities. By the late 1930s, about 90 percent of the marshes of the northeast U.S. coast had been extensively ditched to control mosquitoes. Filling and diking of marshland for dredging operations, road construction and commercial and residential development have led to the direct loss of wetland complexes.

6.2.1 Gulf of Maine Subregion

The Gulf of Maine is a semi-enclosed gulf bounded landward by the northeastern states of Maine, New Hampshire and Massachusetts, and the Canadian provinces of Nova Scotia and New Brunswick, and seaward by the North Atlantic Ocean. The Gulf of Maine is strongly influenced by both tides and freshwater inflow, primarily from the Androscoggin, Penobscot, Merrimack, and Kennebec rivers in Maine, and the St. Croix and St. John Rivers in Canada. The Gulf of Maine includes more than 23,000 square miles of estuarine and coastal drainage area. The region is influenced by areas of dense human population (Boston, Massachusetts; Portsmouth, New Hampshire; Portland, Maine), as well as large, rural, forested and agricultural areas (such as in northeast Maine). More than five million people live within the Gulf of Maine's estuarine drainage areas, and almost six million people live within watersheds that drain into the Gulf of Maine.

Many of the coastal habitats within the Gulf of Maine subregion have been altered, degraded, or destroyed. Of the original 11,771 acres of spawning and nursery habitat available to Atlantic salmon, only 52 percent (6,115 acres) remain in Maine's rivers today. Of the approximately 6,200 acres of salt marsh remaining in New Hampshire, about 1,000 acres are seriously degraded by tidal restrictions or other problems. In Maine, many of the 255,608 acres of shellfish beds are periodically closed to harvesting, and other coastal areas are often closed to swimming because of bacterial contamination. Only about 15 percent of the original salt marshes remain in the Bay of Fundy region, and less than half remain along much of the rest of the Gulf of Maine coast. Massachusetts has lost more than 50 percent of its original salt marsh acreage, and only 36,000 acres remain today in the Massachusetts Bay region.

In Massachusetts, New Hampshire and Maine, a majority of salt marshes have been ditched and drained for mosquito control, and roads and coastal development have severed links between land and sea. Dredging for public and private water access and dockage is resulting in a loss of shallow water habitat. Populations of waterfowl, seabirds and diadromous fish have declined significantly with increased pressures and impacts on coastal habitats. Less obvious impacts, such as poor water quality, have contaminated shellfish beds and decimated meadows of seagrass, which many species of fish and invertebrates depend on for survival.

6.2.2 Southern New England/New York Bight Subregion

The Southern New England/New York Bight subregion (Buzzards Bay, Massachusetts south to Hudson-Raritan Estuary, New York/New Jersey) is characterized by a diverse system of sounds, bays, lagoons, harbors, coastal streams, tidal rivers, and associated habitat. This area has been historically renowned for its rich fisheries, abundance of waterfowl, diverse wildlife, productive marshes, scenic beaches, and outstanding recreational opportunities. As one of the most populous and heavily industrial coastal areas in the world, it has also been an area of unprecedented human population growth. More than 22 million people live in this area's estuarine drainage area. Massive urban coastline development in recent decades has resulted in dramatic declines in this subregion's living resources and the large-scale loss and degradation of essential estuarine and coastal habitat.

Dams are present on all of Rhode Island's major rivers, preventing or seriously limiting the spawning migration of diadromous fish. At least 33 percent of Narragansett Bay's shellfish beds (36,000 acres) are closed to harvest because of pathogen contamination. Rhode Island has lost 50 percent of its coastal wetlands since European colonization. Of those that remain, 70 percent suffer from restricted tidal flow, 60 percent are affected by dumping and filling activities, and 60 percent are affected by invasive species. More than 35 percent of Long Island Sound's tidal wetlands have been lost over the past century. Almost 75 percent of all tidal (fresh and salt) marshes in the Hudson-Raritan Estuary have been lost to development.

The extinction and extirpation of several species of plants and animals in this subregion, population declines of others, and consequent biological diminution of the area can be attributed to many factors. Most prominent are the destruction of natural habitats through dredging, filling, ditching and draining of wetlands; highway and building construction; and pollution of sediments and waters by environmental contaminants such as chlorinated hydrocarbons, heavy metals, oil, pathogens and nutrients associated with various human activities. Other factors include overharvesting of fishery resources, intensive recreational use of shoreline beaches, and expanding populations of certain nuisance and exotic species and their competitive displacement of native species.

6.2.3 Mid-Atlantic Subregion

The Mid-Atlantic subregion (Barnegat Bay, New Jersey, south to the Chesapeake Bay, Virginia) is characterized both by intensely developed urban areas like Wilmington, Delaware; Baltimore, Maryland; Washington, D.C.; and Norfolk, Virginia, as well as large rural areas where agriculture dominates the landscape. More than 22 million people live in the Mid-Atlantic watershed, yet 30 percent of the estuarine drainage area in the Chesapeake Bay, Delaware Bay, and Delaware Inland Bays is agricultural. The Mid-Atlantic has the largest estuarine and total drainage areas in the Northeast Atlantic region (29,500 and 85,500 square miles respectively), with almost half of all freshwater entering estuaries in the Northeast Atlantic region flowing through its tributaries.

More than 30 percent (37,000 acres) of coastal habitat in Ocean County, New Jersey was lost between 1953 and 1973. At least 25 percent of the Delaware Estuary's original wetlands

have been lost, and more than 33 percent of tidal wetlands in Delaware Estuary are invaded with *Phragmites*. More than 25 percent of tidal wetlands in Delaware's Inland Bays were lost between 1938 and 1973, and more than 2,000 acres of estuarine habitats have been lost in Maryland's coastal bays since the 1930's, mainly from development. The restoration of oyster reefs and shellfish beds is a primary concern in the Mid-Atlantic. Shellfish habitat in Chincoteague Bay has declined from 2,000 acres in the early 1900s to less than 200 acres today. The Chesapeake Bay has lost more than 60 percent of its historical wetlands, and it is estimated that there are more than 2,500 obstructions (e.g., dams, culverts, bridge aprons) to migration of diadromous fish in tributaries to the Chesapeake Bay. The Chesapeake Bay had an estimated 600,000 acres of SAV beds at the time of European colonization. In 1997 only 67,000 acres remained (an 88 percent decline) as a result of disease, nutrient enrichment, development and storm disturbance. Populations of the famous Chesapeake Bay oyster have dwindled to two percent of their historical levels because of overharvest and disease.

The key threats to habitats and species of concern in the Mid-Atlantic subregion are: direct habitat alterations due to development; dredging, filling, diking, draining, tidal restriction and alteration, shoreline armouring and hardening, dams, water diversions and low flow, pathogens such as *E. coli*, *Pfisteria*, red/brown tide and other viruses, nutrient loading from agricultural runoff, urban and stormwater runoff, sewage and septic runoff, and toxic contamination by heavy metals.

6.3 Southeast Atlantic

The Southeast Atlantic region is defined here as the coastal and estuarine zones of the states of North Carolina, South Carolina, Georgia, the Atlantic coast of Florida (including South Florida, the Everglades, the Florida Keys and Florida Bay), the U.S. Virgin Islands and Puerto Rico. The Southeast Atlantic estuarine region is one of the largest, most diverse and most productive coastal areas in the United States. Eighteen estuaries and two sub-estuaries, totalling almost 56,000 square miles of total drainage area characterize the region. River drainage areas range in size from 500 square miles (New River) to over 11,600 square miles (Albemarle-Pamlico Estuary). Wetlands cover over 9,000 square miles of the region, and forested wetlands constitute three quarters of southeast wetlands. Total salt and brackish marsh acreage in this region is 894,000 acres, or 16 percent of the nation's total coastal wetlands.

Broad-scale climatic patterns explain much of the region's diversity; the Southeast's most distinctive characteristic is diversity at small scales. Primary habitat types include longleaf pine savannah, freshwater wetlands, shallow water lagoons behind sand coastal barrier shorelines, estuarine marshes, barrier islands, maritime forests, mangrove forests, seagrass beds, emergent coral reefs, and subtropical lagoons. Major factors contributing to estuarine and coastal habitat loss and degradation include: logging, conversion to agriculture and development, hydrological alteration and anthropogenic and natural threats. It has been estimated that 78 percent of southeastern wetlands were lost between settlement and 1980. Southern floodplain forests may constitute the largest remaining riparian habitat type in the United States. Estimates of extent vary from 25,482 square miles to 50,193 square miles. This areal extent is decreasing (0.51 percent per year from 1954 to 1974), with a total loss of about 63 percent. These forests have been converted to farmland, industrial parks and urban areas while levee construction,

channelization, agricultural runoff, cattle grazing, timber extraction and invasions of non-indigenous species influence surviving stands.

6.3.1 North Carolina Subregion

North Carolina encompasses 2.2 million acres of sounds, creeks and marshes, and nearly 4,400 miles of estuarine shoreline. The state includes eight coastal river basins, which provide spawning habitat for a number of anadromous species of fish. Approximately 50 percent of the fish caught on the east coast of the United States depend upon North Carolina's estuarine system at some point in their life cycles. Of the nearly five million acres of wetlands located in North Carolina, over 95 percent are found in 41 counties that make up the Coastal Plain. The sounds of North Carolina are uniquely characterized by wind-driven tides that affect circulation patterns within the sounds and saltwater concentrations in their tributaries.

Within North Carolina estuaries, fish landings, seagrass beds and catches of clams, oysters and bay scallops have all experienced declining trends due in part to overfishing, eutrophication, sediment loadings and other pollution. Throughout North Carolina, the areas closed to shellfishing as a result of long-term pollutant monitoring increased by nearly 40,000 acres over a 13-year period. This increase can be attributed to increased nonpoint source pollution loads in rapidly growing regions. Pressure on sensitive ecosystems has resulted from increased coastal development. Currituck, Dare, Hyde, Carteret, Onslow, Pender, New Hanover and Brunswick counties experienced a population increase of 32 percent between 1977 and 1997.

Urbanization and population growth have led to greatly increased nonpoint source pollution of coastal waters. Point source discharges are increasing as well. In the Cape Fear Basin alone, there are 641 licensed point source discharges. Eighteen of North Carolina's 26 commercially important fish species are exhibiting signs of stress from overfishing or environmental degradation. Pollution from stormwater and marinas has resulted in the permanent closure of 56,000 acres of shellfish waters. Since 1990 more than 1,000 acres of Outstanding Resource Waters, so designated because of their superior quality, have been closed to shellfishing. State reporting indicates that nonpoint source pollution is thought to account for 85 percent of the total impaired acreage.

6.3.2 South Carolina Subregion

The coastal zone of South Carolina encompasses approximately 8,116 square miles and ranks fourth nationally in its acreage of salt marsh estuaries. There are 187 miles of ocean beaches, with 2,876 miles of shoreline around its estuaries, bays, rivers and creeks. South Carolina's estuaries account for almost one-sixth of all salt marshes on the east coast of the United States. It is estimated that this includes 540,445 acres of total coastal marsh, 344,500 acres of salt marsh, and approximately 4.5 million acres of total freshwater marsh. Included among South Carolina's freshwater wetlands are approximately 79 coastal impoundments totalling 70,000 acres of impounded coastal marshes. Unique rice field impoundments, dating back to when rice culture was common, attract waterfowl.

The coastal region of South Carolina has experienced a 40 percent population increase in the past 20 years. The population of urban areas has increased 250 percent within this same period. This rise in population, along with increased tourism has altered habitats and water quality. Significant trends within the coastal zone include hydrologic modifications and conversion of habitats for human uses. Urban expansion has led to conversion of wetlands in various locations, most notably in the areas around Hilton Head, Charleston, North Charleston and in the vicinity of Myrtle Beach and Columbia. Hydrologic modifications include multiple rice field impoundments covering 70,451 acres of land.

Wetlands are being altered or destroyed due to increasing residential, commercial and industrial development, as well as changing forestry practices. South Carolina has been relatively successful in protecting its tidal wetland resources, and has retained approximately 73 percent of its historic acreage. Although tidal wetlands have been relatively well protected, significant losses have occurred in freshwater nontidal areas. Within South Carolina's estuaries, nearly one-third of the shellfish areas are permanently closed. Other key threats to habitat include nonpoint source pollution from chemical and sediment runoff, vessel operation, aquaculture and dumping, which results in burial of habitats with fill or debris, and the introduction of toxics and contaminants.

6.3.3 Georgia Subregion

Georgia is comprised of five estuaries: the Savannah, Ogeechee, Altamaha, Satilla, and St. Marys Rivers. The Altamaha is the largest river of the Georgia coast and the second largest basin in the eastern United States. It is a relatively undisturbed analogue of the Savannah River, with no major channelization, dredging or reservoirs. The Georgia coastline is approximately 100 miles long. The coastline consists of a chain of barrier islands separated from the mainland by a four- to six-mile wide band of coastal marsh.

The Georgia coastline is relatively unaffected by the heavy development that has been seen in other areas of the south Atlantic coast in recent years, and Georgia's barrier islands and marshes have been less altered by human activity than in most other coastal areas. Development has largely been of a residential or recreational nature and has usually had a minimal effect on salt marshes. In earlier days, considerable alteration of many marshes near the barrier island uplands was due to cultivation of sea-island cotton. Even though U.S. Highway 17 was paved through coastal Georgia in 1926, only four barrier islands have road access from the mainland. Seven of the 14 barrier islands are in federal ownership, and thus protected from heavy development and loss of habitat areas.

In Georgia, the Savannah River has experienced the greatest human impact. Large dams, dredging and channelization have removed the vegetated flood plains in the freshwater tidal zone.

6.3.4 Florida Subregion

This coastal subregion includes peninsular Florida extending from the northern edge of Lake Okeechobee north to the transitional zone around the Suwanee River in northern Florida,

and from the northern edge of Lake Okeechobee south through the Florida Keys, including the Everglades and Florida Bay. The South Florida and Florida Keys region contains one of North America's most diverse assemblages of terrestrial, estuarine and marine fauna and flora and represents one of the most complex ecosystems on earth. Important habitat areas in the Florida subregion include the Indian River Lagoon, the Florida Keys, the Everglades and the largest seagrass bed yet documented (5,792 square miles) off the south Florida coast.

Although urban centers represent only about four percent of its estuarine drainage areas, Florida has a rapidly urbanizing coast extending north from Miami to Jacksonville at the mouth of the St. Johns River. The population in 126 counties of this region is projected to increase by more than 24 percent between 1988 and 2010. The southeastern U.S. coastal region continues to attract visitors and residents in increasing numbers, with consequent stress to and loss of the natural resources and habitats within these coastal and estuarine zones. There are nearly 2,700 public outdoor recreation sites comprising about 5,200 square miles of land in this coastal region. Over 60 percent of these lands are managed for hunting, while about 32 percent are set aside for conservation, preservation and aesthetic value. Of the almost 900 public sites which provide access to the water, 61 percent are adjacent to estuarine waters and 36 percent provide access to the Atlantic Ocean.

Rapid urbanization and associated coastal development in southeastern Florida over the last 100 years have virtually eliminated the low coastal wetlands along approximately 21 miles of mainland shoreline and approximately 12 miles of barrier island shoreline bordering Biscayne Bay. These estuarine ecosystems have been replaced by eroding, altered shorelines or hardened shorelines with numerous bulkheads. In southeastern Florida, development of reclaimed swamp lands, uplands and newly created lands produced by dredging and filling practices essentially began with the completion of the Florida East Coast Railroad in 1896. This, and the networks of draining, caused serious environmental degradation to southeastern Florida's coastal wetland and estuaries. Dredging and filling in the early 1900s to create navigation channels and harbors in Biscayne Bay resulted in over 20 human-made spoil islands and two partially filled natural mangrove islands. Dredging, draining and diking of the river systems leading into and out of Lake Okeechobee occurred in the 1950s with the implementation of the Central and Southern Florida Project under the Flood Control Act of 1948.

Historically, the Florida Everglades system extended from Lake Okeechobee to Florida Bay. The first phase of the CS&F Project was undertaken for flood control, water level control, water conservation, prevention of salt water intrusion, and preservation of fish and wildlife. However, 50 percent of the original wetland area (3,861 square miles) has been drained and used for agriculture and residential development. Three of the seven physiographic landscapes had been entirely eliminated (swamp or custard-apple forest, peripheral wet prairie, and bald cypress stand), and other landscape types had been reduced by 74 percent (sawgrass plains), 47 percent (sawgrass-dominated mosaic), 24 percent (southern marl-forming marshes) and 13 percent (wet prairie/slough-tree island-sawgrass mosaic).

There are about 780 square miles of mangrove forests in Florida. Between 1943 and 1973, there has been a loss of about 2.5 percent of mangrove habitat in the three counties with the highest original total due to coastal development (draining and filling for urban areas and

mosquito control); reductions in freshwater flow because of diversion of runoff from inland areas; invasion of nonindigenous species; port development; and natural causes such as tropical storms and hurricanes.

6.3.5 Puerto Rico and U.S. Virgin Islands Subregion

Centrally located in the West Indies, Puerto Rico and the Virgin Islands are in the eastern extreme of the Greater Antilles, about halfway between the southern tip of Florida to the north and the Caribbean coast of Venezuela. Puerto Rico is roughly 111 miles long by 36 miles wide. Aside from the main U.S. Virgin Islands, 54 small islands flank St. Thomas, St. Croix and St. John. The U.S. Virgin Islands and Puerto Rico provide critical nesting, foraging and developmental habitat for three species of sea turtle: the leatherback and the hawksbill (both endangered species), and the green sea turtle (listed as endangered/threatened). Coral reefs and seagrasses serve as habitat for these species, where they typically remain until they reach maturity. Green and hawksbill sea turtles forage throughout the coastal areas, but the only island which still supports any green sea turtle nesting is St. Croix, with an average of 100 nests each year between 1980 and 1990.

There were nine square miles of mangrove in the U.S. Virgin Islands and Puerto Rico in 1995, an increase of 61.2 percent since 1936. Marsh areas in 1995 were three square miles, a decrease of 42.2 percent since 1936. Combined, there was a gain of 1.5 square miles or about 20.6 percent. The apparent gain of mangrove forest could be the result of successional change from one type of habitat to another due to natural and/or human influences. By 1936, significant impacts to the wetlands of the area had occurred due to sugar cane plantations. The increase in wetland area corresponds to the natural regeneration process following abandonment of agricultural activities.

Increases in tourism and associated real estate development have greatly impacted the key habitats and species of this region. Due to relatively long periods of evolutionary isolation, island ecosystems are more susceptible to change than those on continents. Deforestation and fire, introduction of grazing animals, cultivation and the introduction of weedy plants have all contributed to alteration of the ecosystem.

6.4 Gulf of Mexico

The Gulf of Mexico region is defined as the Gulf coasts of Texas, Louisiana, Mississippi, Alabama and Florida, excluding the Everglades, the Florida Keys and Florida Bay. The 31 estuarine systems within the Gulf of Mexico region cover approximately 12,000 square miles, accounting for more water surface area than any other region of the United States. The drainage basin for the Gulf of Mexico, which includes the area drained by the Mississippi River, is approximately 1.6 million square miles, or 60 percent of the land area of the continental United States. The Gulf region contains approximately five million acres of emergent salt marsh and mangrove vegetation, accounting for more than half of the nationwide total. Gulf Coast estuaries support oyster reefs, SAV, tidal flats, open water habitat, barrier islands, swamps, bogs, prairies and forests.

Gulf Coast estuaries are centers of residential, recreational, commercial, agricultural and industrial activity. They support cities such as Corpus Christi and Houston, Texas; New Orleans, Louisiana; Mobile, Alabama; and Tampa, Florida. The Gulf Coast has one of the fastest growing populations in the country. In 1990 it was estimated that the population of the Gulf region would increase approximately 26 percent by 2010. Throughout the Gulf region, estuaries and their associated habitats have been altered due to the discharge of industrial pollutants and urban waste; alteration of freshwater inflows; dredging of ship channels and oil and gas canals; filling of wetlands; armouring of shorelines; introduction of exotic species; deforestation; application of fertilizers and pesticides; and severing of migratory pathways.

Seagrasses have declined markedly since the 1950s, with most estuaries losing between 20 percent and 100 percent of their seagrass habitat. This is mostly the result of water quality degradation from increasing human impacts. Six species of seagrass occur in the Gulf region, accounting for a total of approximately 2.5 million acres. Water quality within Gulf estuaries is a key issue. More than half of the oyster-producing areas in the region are closed, either permanently or conditionally. There also have been significant changes in both the quantity and timing of freshwater entering the estuaries.

6.4.1 Western Gulf of Mexico Subregion

The Western subregion, extending from the southernmost coast of Texas to just south of Galveston Bay, is characterized by low levels of freshwater inflow, sandy sediments, clear water, and extensive growth of seagrasses. Estuaries in this subregion support salt marshes, tidal flats, oyster reef, serpulid worm reefs, freshwater marshes, open bay, barrier islands and riparian woodlands.

Within the subregion, direct loss of habitat has been attributed to erosion, damage by invasive species and other anthropogenic factors such as dredging and filling, hydrologic alteration and shoreline modification. Habitat also is being degraded as poor water and sediment quality affect the function of estuarine systems. Degraded water and sediment quality as a result of point and nonpoint source pollution, and alteration of freshwater inflow have been identified as major concerns for the subregion. There also is concern that continued growth and changing land uses within the subregion will have additional adverse effects, including fragmentation of habitat.

6.4.2 Central Gulf of Mexico Subregion

The Central subregion includes Galveston Bay and spans the coasts of Louisiana, Mississippi and Alabama. The nutrient-rich waters and muddy sediments support extensive marsh and oyster reef habitat. Other key habitats within the subregion are freshwater marsh, oyster reef, seagrass, swamp, tidal flats, open bay, barrier islands, nesting islands, bayous, pitcher plant bogs, dune swales, forested wetlands, coastal prairie and long-leaf savannah.

The marsh-dominated estuaries of the Central Gulf have experienced tremendous habitat losses in recent decades. In Louisiana, more than 960,000 acres of marsh have been lost since 1930. Currently, an area of marsh the size of a football field is disappearing every 30 minutes. In Galveston Bay, more than 30,000 acres of marsh and approximately 90 percent of the seagrass beds have been lost since the 1950s. Alabama's fresh and salt marshes declined by 69 percent and 29 percent, respectively, between 1955 and 1979. Habitat, residences, property and business opportunities are being lost to subsidence and subsequent erosion. Habitat fragmentation is another concern.

A variety of factors have been identified as contributing to habitat loss in the Central Gulf of Mexico subregion. Among these are subsidence, erosion and direct alterations, such as dredging and filling, changes to hydrology, shoreline modification, sand extraction, prop scarring, shoreline alteration and disturbance from trawling. Key among these is the loss of sediment and nutrients to Louisiana marshes, resulting in the levelling of the Mississippi River. Invasive species, particularly herbivores such as nutria, are also responsible for habitat loss. Habitat areas of particular concern include SAV, emergent vegetated wetlands, oyster reefs, shellfish beds, and intertidal zones, which support many important fisheries as well as a variety of migratory neotropical birds, threatened and endangered species such as the Florida yellow bat, American alligator, piping plover, Alabama red-bellied turtle, eastern indigo snake, black bear, and gopher tortoise.

6.4.3 Eastern Gulf of Mexico Subregion

The upper Gulf Coast of Florida, south to Anclote Key, constitutes the eastern subregion. Moderate freshwater inflow, coarser sediments and clearer water than is found in the central subregion support extensive seagrass habitat. Where the limestone bottom is exposed, sponge and soft corral communities exist. In addition, the subregion also supports salt marsh, freshwater marsh, oyster reef, open water, barrier islands, bayous, dune lakes, forested wetlands, sand pine, pine flatwoods, scrub hammock and hardwood hammock.

Within the eastern Gulf, habitat is being lost, degraded, fragmented and threatened. Hydrologic alterations, invasive species, dredging and filling have caused much of the habitat loss within this subregion. Changing land uses, an increase in the amount of polluted runoff, point and nonpoint sources of pollution, changes in freshwater inflow and withdrawal of groundwater threaten estuarine habitats in this subregion. Fishery species that have been declining in Pensacola Bay include blue crab, shrimp, oysters and bay scallops, redfish, flounder, mullet, menhaden, speckled sea trout, and largemouth bass. Protected species also of particular concern include pelicans, plovers, oyster catchers, skimmers, terns, raptors, alligators, and river otters.

6.4.4 Southern Gulf of Mexico Subregion

The southern subregion encompasses the Gulf Coast of Florida from south of Anclote Key to Cape Romano. In addition to salt marsh and seagrass, the clear, shallow estuaries of the southern Gulf support extensive mangrove habitat. Other key habitats are oyster reef, freshwater

marsh, barrier islands, swamp, salt pans, dry-zone scrub, pine flatwoods, oak scrub, scrub flatwoods and hammocks.

Direct loss of habitat has occurred as a result of erosion, degraded water quality, and physical disturbance. Since 1870, approximately 80 percent of the seagrasses and 50 percent of the salt marsh and mangrove habitat in Tampa Bay have been lost. Several protected species inhabit the southern Gulf subregion, including: West Indian manatee, Atlantic loggerhead turtle, gopher tortoise, indigo snake, Florida panther and 16 species of threatened or endangered birds. These species are threatened by a variety of habitat alterations. There also is a concern that habitat is becoming fragmented and migration corridors are being severed.

6.5 California

6.5.1 Northern California Subregion

The Northern California subregion encompasses the coast from the Oregon border to Point Conception, California; more than 800 miles of coastline. The area includes significant estuaries, such as San Francisco Bay, Humboldt Bay, Tomales Bay, Drakes Estero, Morro Bay, Eel River, and Elkhorn Slough. These estuaries range in size from 452 square miles to one square mile of water surface area, and total only 492 square miles. Among these estuaries, habitats include salt, brackish and freshwater marsh, mudflats, seasonal wetlands, eelgrass beds, diked baylands (including diked wetlands, agricultural wetlands, managed wetlands and salt ponds), beaches and dune, open water lagoons, tidal channels, uplands and riparian areas. Kelp forests also connect enclosed waters, nearshore and offshore ocean zones, and are among the most productive and diverse ecosystems in the world. Along the northern California coast the major kelp species are the giant kelp (*Macrocystis pyrifera*) and the bull kelp (*Nereocystis leutkeana*), which form dense beds and serve as a vital source of food for various sea life. In addition, harbor seals, California sea lions, and the federally threatened southern sea otter feed on the fish and invertebrates occupying the kelp forests.

Since 1850, more than half a million acres of wetlands in the San Francisco estuary have been modified. In the delta, 97 percent of the original tidal wetlands have been converted to farmland or other uses. In the bay, 82 percent of the original tidal wetlands have been filled or converted to other wetland types. Approximately 95 percent of the San Francisco Bay's riparian habitat has been damaged or destroyed. Sonoma County has the least amount of protected open space: 63,013 acres presently protected out of approximately one million acres. In some areas of Morro Bay, 85 percent of the coastal dune scrub community has been converted to suburban or urban development.

Many of the threats that gave rise to past concerns continue today. Among them are direct conversion and loss of habitat from draining, diking and filling. This includes, but is not limited to, conversion of land for agricultural use, urban development, salt ponds and flood control. Remaining areas face many threats, including fragmentation, point and nonpoint source pollution from adjacent land use (urban and agricultural runoff, storm drains, boating activities), reduced tidal influence caused by accumulated sediments or construction of physical barriers;

dredging and waterway modification, intense human activity, invasion of non-native plant species, and dredging and harvesting in kelp beds.

6.5.2 Southern California Subregion

The Southern California subregion includes the area from Point Conception southward to the Mexican border. Habitats in Southern California include salt marsh, open water lagoon and tidal channels, seasonal wetlands, tidal mudflats, brackish and freshwater marsh, upland and riparian beach and dune. Estuarine-dependent species are too numerous to list. However, there are more animal and plant species listed as threatened or endangered in Southern California than in any other region of the state. These include, but are not limited to, steelhead trout, tidewater goby, California halibut, California least tern, clapper rail, snowy plover, march bird's beak, southern tarplant, salt marsh wandering kipper, Pacific little pocket mouse, salt marsh shrew, and the silvery legless lizard.

Estuaries in coastal southern California are comparatively small and precious, given the region's narrow coastal shelf and semi-arid climate. But with 8.7 percent of the state's landmass and almost 50 percent of the state's population, this area has experienced an even greater loss of wetlands than the entire state, which has lost a greater percentage of its wetlands than any other state. The five counties of coastal Southern California are home to 16 million people; more people than all but two states (New York and Texas) and more people than the 15 least populous states combined. A full 25 percent of the nation's coastal population (those within 50 miles of the coast) lives in southern California. As it stands, this region has a radically altered hydrology, with more flood control dams (227), more debris basins (193), and more concrete channels than any other region in the country. It is the only major region where storm drains carry runoff directly to the ocean rather than through sewage treatment plans, which accounts in large part for the 150 beach closures that occurred in southern California during the summer of 2000, undermining a tourism and recreation industry worth over \$7 billion annually to the region. Its network of highways and freeways is unparalleled, and the Los Angeles/Long Beach port complex is three times larger than the next largest in the country and the third largest port facility in the world. With a gross regional product of \$500 billion, the region has the 12th largest economy in the world. All of these factors have led to the loss and degradation of the region's coastal wetlands.

The level of habitat loss in Southern California has been extensive: (1) coastal wetlands have declined from approximately 53,000 acres to 13,000 acres; (2) estuarine wetlands have been eliminated by 75 percent to 90 percent as a result of filling or dredging in the last century; and (3) an estimated 95 percent of the historical wetlands acreage of the Santa Monica Bay watershed has been destroyed. In the meantime, an estimated 55 percent of the animals and 25 percent of the plants designated as threatened or endangered depend on wetland habitats for survival. The threat of additional habitat loss associated with urban expansion and direct conversion (e.g., dredging and filling, constructing dikes) continues to be a problem. Reduced tidal influence, changes in the volume and timing of freshwater flows, habitat fragmentation, invasion by non-native vegetation and predator animals (e.g., domestic dogs and cats), disturbed patterns of erosion and sedimentation, subsidence from oil and gas extraction, and disturbances from human traffic are all significant threats.

6.6 Pacific Northwest

The Pacific Northwest has been divided into three subregions: Puget Sound, the Oregon and Washington Coasts and Columbia River Estuary, and Alaska. A tremendous diversity of ecosystems characterizes the Pacific Northwest region. These include more than 1,200 square miles of tidal wetlands, marshes, intertidal and mud flats, kelp beds, the largest bed of seagrass along the Pacific coast of North America, and the largest known single stand of eelgrass in the world, located in the Izembek Lagoon. These habitats are essential for several estuarine-dependent species and serve as spawning and rearing habitat for a number of fish. While the species vary according to the subregions, endemic species include six species of anadromous salmonids (Chinook, coho, chum, sockeye, pink, and steelhead—all listed as federally threatened under the ESA except the pink salmon), Dungeness crab, seals, sea lions, whales, and the highest density of the large geoduck shellfish in the Pacific Northwest.

The Pacific Northwest has experienced extensive habitat loss in many of its coastal estuaries. The major causes of stream and estuarine habitat degradation have been historical forestry practices, impediments to fish passage (e.g., dams and other obstructions), increased shoreline development, and spill events. Many historical forestry practices did not take into consideration riparian management concerns in relation to fish habitat and water quality. Current forestry practices manage for the adequate preservation of fish habitat by maintaining a short- and long-term source of large woody debris, stream bank stability, channel morphology, water temperature, stream flows, water quality, adequate nutrient cycling, food sources, clean spawning gravels and sunlight-to-shade ratio. Urban shoreline development and port activities have placed an increased stress upon marine resources as in- and over-water structures, shoreline armament, accidental groundings (e.g., barges, log-booms, oil tankers, personal marine vessels), wood-waste accumulation from nearshore log transfer facilities, and the legal and illegal filling of wetlands and navigable waters have increased.

6.6.1 Puget Sound

The geographic scope of the Puget Sound subregion covers subestuaries and nearshore habitats of the entire Puget Sound basin, including (but not limited to) the water bodies of the Straits of Georgia and Juan de Fuca, Admiralty Inlet, Hood Canal and adjacent waters. Puget Sound is one of the most unusual estuaries in the United States, in that deep marine waters invade a heavily urbanized lowland region to form a vast inland sea. The area is quite sheltered from the forces of the ocean, and harbors large quantities of plant and animal life. The Sound is used as nursing and foraging grounds for many animal species. Natural regimes of tidal influence and freshwater input are vital to the ecology of the estuary, and changes in the tidal flow or freshwater quality and quantity as a result of human disturbance can alter and eradicate many plant and animal communities. Drying of wetland areas and the introduction of exotic species can have a dramatic effect, and upset ecosystem relationships.

While at least 35 percent of Washington's threatened and endangered species require healthy wetlands for survival, Puget Sound has experienced an enormous amount of wetland loss. More than 70 percent of tidal wetlands were lost in the past century, and 33 percent of marine shorelines have been modified. In Skagit Valley, 37 of the original 40 square miles of

wetlands are estimated to have been lost, resulting in a 93 percent total loss, and urban areas such as Seattle and Tacoma have lost close to 100 percent of their wetlands. In addition, Puget Sound's shorelines have been severely altered by development. Since the arrival of settlers in the early 1800s, at least 50 percent and as much as 90 percent of riparian habitat in Washington has been lost or extensively modified. Human activities have modified one-third of Puget Sound's shoreline (approximately 800 miles); 25 percent of these modifications have taken place in intertidal areas. Eelgrass beds, shellfish beds, and benthic habitats have become severely degraded. Thirty-three percent of eelgrass beds have been lost as a result of dredging, filling and diking. Since 1980, approximately 25 percent of the area classified for commercial shellfish harvesting has been downgraded and taken out of production because of high water concentrations of pathogenic bacteria. A study of urban embayments found that 5,250 of 15,000 acres are contaminated above the state sediment quality standards, while more than 3,000 acres of Puget Sound's sediments are so contaminated that federal law requires that they be cleaned up.

Within the Puget Sound subregion, losses and degradation of key habitats can be attributed to the following threats: dredging and disposing of sediments; nonpoint source pollution, toxic chemicals (PCBs, PAHs, etc.) metals; shellfish contaminants (marine biotoxins, bacteria and viruses, chemicals); marinas and recreational boating; population growth; agricultural practices; aquaculture development; erosion; urban development and shoreline armoring; forestry management practices; altered drainage patterns from filling, dredging, ditching and diking; invasive species; culverts, dams, and tide gates; septic system failure; nutrient enrichment; port development; shipping, and transportation; and discarded debris in intertidal and subtidal habitat.

6.6.2 Oregon and Washington Coasts and Columbia River Estuary Subregion

Oregon and Washington's coastal areas are areas of high biological productivity. They provide critical habitat for many species of cultural, commercial and recreational importance, including several species listed as endangered and threatened under the federal ESA. Since colonization, many of the region's estuaries have been affected by altered hydrology, urbanization, water pollution and the introduction of exotic species. Widespread agricultural and urban development of coastal lowlands in the Pacific Northwest began relatively late in the history of the United States. By the time the coastal areas of Washington and Oregon were settled, society had developed clear goals and efficient methods for converting tidal wetlands to other land uses via diking, dredging and filling activities. As a result, thousands of acres of biologically productive estuarine habitat have been lost to development. This has had a negative impact on salmon and other finfish and shellfish species, as well as on eelgrass beds, tidal marshes and general biodiversity.

The following numbers indicate the damage that has been done through conversion of land use. Since the 1800s, urbanization converted 90 to 98 percent of Washington's coastal wetlands, and only 35 percent of Washington's estuaries have good water quality. More than half the tidal marshland and 70 percent of the tidal wetlands have been destroyed in the Columbia River Estuary since 1870. Only 10 percent of the historic anadromous fish stock remains. Tillamook Bay has lost 85 percent of marshlands to diking and draining. Historical

tidal wetlands covered 5.52 square miles; 0.3 square mile is native wetland and 1.3 square miles have been restored. Yaquina Bay has lost 14 percent of its tidelands to filling, and Willapa Bay's infestation of *Spartina* is projected to increase from 3,200 acres in 1997 to 30,000 in 2030.

Primary threats in this subregion include modification and loss of habitat through diking, draining, damming, tide gates, culverts, filling, structures (i.e., sea walls, jetties, and docks), water diversions and altered flow, and dredging; sedimentation problems caused by anthropologically altered hydrology; loss of biodiversity, especially through invasive or exotic species; and degradation of water quality (elevated levels of fecal coliform bacteria, nonpoint source pollution) from agricultural and forestry practices (creation of pastureland, erosion, suspended sediments).

6.6.3 Alaska Subregion

Significant damage to Alaska's coasts and estuaries has been caused by various threats in this subregion including the Exxon Valdez oil spill. Since then, efforts have been made to repair the damage done and to prevent further degradation. More than 1,400 miles of shoreline, including haul-out areas for harbour seals, the mouths of more than 300 salmon streams, and nesting and foraging habitat for black oystercatchers have been protected. Various types of coastal and estuarine restoration projects have occurred. These include restoration of wetland, riparian (including shoreline and riverbank stabilization) and instream (including salmon spawning) habitats; non-native predator removal projects; water quality monitoring in relation to forest harvesting activities; and seagrass restoration.

Within the Alaska subregion, losses and degradation of key habitats may be attributed to the following threats: used oil, household hazardous waste and scrap metals; mass wasting from forestry practices; urban and port development; roads and roadway runoff; wastewater and sewage disposal; oil and gas development, including associated pipelines and underwater utility lines; impacts associated with tourism development; and gravel mining.

6.7 Pacific Islands

The United States affiliated Pacific islands discussed in this section are those with federally-approved coastal management programs, and include the State of Hawaii, the Commonwealth of the Northern Mariana Islands (CNMI), and the territories of Guam and American Samoa. All are tropical oceanic islands; however, they are widely dispersed across the Pacific. Hawaii lies near the edge of the tropics in the North Pacific Ocean and is the most isolated island chain in the world in relation to continental areas. Guam is the southern terminus of the Mariana Islands chain and the remainder are part of the CNMI. These islands lie near the equator in the Western Pacific Ocean. Guam is 3,800 miles west-southwest of Honolulu and 1,500 miles south-southeast of Tokyo. American Samoa is south of the equator in the central Pacific Ocean, approximately 2,500 miles southwest of Hawaii.

While limited in extent, estuarine habitats in the Pacific Islands can be quite diverse. In Hawaii, brackish-water marshes, fishponds, anchialine pools and mudflats are the most significant estuarine habitats. In the other island areas, most estuarine habitat is mangrove forest.

These habitats support a wide variety of invertebrates such as shrimp, crabs and molluscs. Wetland and coastal habitats also support a range of resident and visiting waterfowl, shore birds and seabirds. In addition, a very important group of organisms rely on estuaries to complete their life cycles—freshwater amphidromous fish (gobies), molluscs and crustaceans. These organisms have evolved from marine forms to inhabit freshwater streams in all of the Pacific Islands.

Throughout the Pacific Islands, introduction of exotic species, discharge of industrial pollutants, oil spills, filling of wetlands, application of fertilizers and pesticides, military administration of remote islands, and major land use modification to promote agriculture and forestry practices and urban growth have altered estuaries and their associated habitats. The State of Hawaii includes 54.8 square miles of estuaries, 43 percent of which fully support their designated uses, 56 percent of which are impaired by some form of pollution or habitat degradation, and one percent of which are threatened for one or more uses. Oahu, which supports approximately 80 percent of the state's population, has more significant wetland loss than the other islands; however, rapid growth and expansion of the tourist industry are a constant threat to coastal resources of all the main islands. Harbor development, for both military and civil uses, has destroyed or degraded estuarine areas, as exemplified by coastal development in Pearl Harbor. Channel dredging also has eliminated estuarine habitats in some areas. Diversion of stream water for agriculture historically changed coastal salinity regimes in some areas, notably Kaneohe Bay on Oahu, reducing estuarine habitats.

Threats to the wetlands of the U.S. Pacific Protectorates can be split into two separate categories: agriculture before World War II and urbanization and infrastructure development after World War II. Large expanses of estuarine habitats have been lost as a result of filling in all island areas. Filling of wetlands for development has resulted in the loss of 64 percent of Saipan's wetlands, and one-quarter of American Samoa's wetlands at the estimated rate of 4.5 acres per year, with accelerated decline over the past 10 years. To date, it is likely that American Samoa has lost approximately 60 percent to 70 percent of its original wetlands. Pala Lagoon, for example, has been partially filled and its entrance narrowed to build an airport runway. Guam has experienced a large historic loss because of military construction in Apra Harbor in the years immediately after World War II. More recently, an oil spill killed mangrove trees in Sasa Bay. In addition, effluent from sugar cane mills, heavy metals and other contaminated runoff from military bases are all concerns that threaten estuarine health. The CNMI is currently concerned with the impacts of nonpoint source pollution from development, especially in the Saipan Lagoon.

The populations of these islands are increasing at an extremely high rate and the majority of the populations inhabit the immediate coastal area. Although nonpoint source pollution results from a number of sources, infrastructure shortfalls are probably the largest contributor and are starting to be addressed by a number of local and federal government agencies. For example, some government agencies are looking at restoring or creating estuarine habitat to reduce the effects of nonpoint source pollution.

6.8 Great Lakes

Situated on the mid-western border between the United States and Canada, the Great Lakes are the world's largest system of fresh surface waters. The Great Lakes extend approximately 850 miles east to west and 700 miles north to south. Covering a surface area of 94,250 square miles and having over 5,500 cubic miles of water, the total U.S. and Canadian shoreline measures 10,210 miles, including islands and connecting channels. Of that figure approximately half of the Great Lakes shoreline occurs in the states of Michigan, Wisconsin, Minnesota, Illinois, Indiana, Ohio, Pennsylvania, and New York. With the exception of Illinois, all of these states have federally-approved coastal zone management programs, and therefore will qualify for CELCP plan development and funding.

Although each of the Great Lakes has its own separate characteristics, they are all part of one massive integrated water system. The Great Lakes region contains many habitats that are considered rare because of the unique formation of ecosystems, due to the large freshwater lake influence. Great Lakes coastal wetlands differ from inland wetlands due to the influence of large lake processes, including large waves, wind-driven tides (seiches) and especially the long-term fluctuations of Great Lakes water levels. Great Lakes coastal wetlands include the following basic wetland types: aquatic beds dominated by floating-leaved and submergent macrophytes, emergent marshes dominated by emergent macrophytes, beach strands dominated by annual herbs, wet meadows and fens dominated by sedges, dune and swale complexes, bogs dominated by *Sphagnum sp.*, and swamps forested by a variety of lowland conifers and deciduous trees. Coastal wetlands occur along the Great Lakes shorelines where erosive forces of ice and wave action are low, allowing the formation of wetland plant communities.

The Great Lakes coastal wetlands are critical to the Great Lakes ecosystem as a whole. Coastal wetland systems are the most productive aquatic systems in the Great Lakes, and support diverse assemblages of invertebrates, fish, reptile, amphibians, birds and mammals. Over 90 percent of the roughly 200 fish species in the Great Lakes are directly dependent on coastal wetlands for some part of their life cycle. In terms of waterfowl, 24 species of ducks, four species of geese, and three species of swans are known to use Great Lakes coastal wetlands.

There are approximately 883 different coastal wetland ecosystems covering approximately 393 square miles on the U.S. side of the Great Lakes. The extent of coastal wetlands varies for each of the Great Lakes, and numerous natural and human-induced factors have impacted and continue to impact them. Natural stressors include water level fluctuations (both long- and short-term), damage from ice and storms, sediment supply and transport, and biological stressors such as invasive native species or disease. Some of these natural stressors can be both positive and negative; for example sediment supply and transport can result in the formation of barrier beaches or sand pits, which protect macrophytes from waves, but their erosion can expose wetlands to wave action.

Human induced stressors include drainage, filling, dredging, shoreline armouring and modification, changes in water level regime, toxic and nutrient pollution, fragmentation, urban runoff, exotic species invasion, diking of wetlands and global climate change. Lake Michigan's water quality and wetlands have been severely degraded. The Green Bay area has suffered

severe losses and degradation as a result of conversion to agriculture, urbanization and toxic contamination. Along the western shore from Sturgeon Bay, Wisconsin to Chicago, Illinois, urbanization has virtually eliminated former wetlands that once existed near river mouths. The drowned river mouths of the Michigan shoreline have had their hydrology altered by road crossings and have been affected by ditching, agricultural practices and colonization by invasive plant species. In the Lake Huron area, main causes for wetland loss have been shoreline modification, road construction, filling for urban and resort residential development, and dredging and channelization associated with marina development. The Saginaw Bay area historically contained some of Michigan's most extensive coastal wetlands, but extensive drainage for agriculture and ongoing pumping of diked wetlands for farming purposes has resulted in substantial losses.

Along the U.S. shore of Lake Erie, large areas of coastal wetlands have been lost over the past 150 years due to diking for agriculture and development purposes. A large portion of the U.S. shoreline is developed, especially in the Buffalo area where extensive fill has occurred. For instance, the Tiff Street area in Buffalo was formerly the largest emergent marsh on the eastern end of Lake Erie; it was fragmented and largely filled for industrial and railroad development. Many stretches of the U.S. shoreline in western Lake Erie have been modified with dikes, revetments or other shoreline structures for protection of built-up areas and agricultural fields against periodic high water levels and potential for flooding, erosion and property damage. While diking allows for more intensive management of waterfowl and other fauna, it also isolates it from the open waters of the lake, thus impairing many wetland functions. The use of revetments has limited the supply of sediments in the littoral drift in western Lake Erie, so the barrier beaches and sand spits that protect wetland plants from wave action are no longer being replenished at a rate sufficient to match erosion.

For Lake Ontario, along the U.S. shore, wetland losses have been estimated to be near 60 percent. Most of the losses are associated with the heavily populated areas surrounding Oswego and Rochester, but losses have also occurred as a result of resort residential and marina development, especially around barrier beaches. The primary stressor for Lake Ontario and the St. Lawrence River is the regulation of water levels in the St. Lawrence Seaway. The lack of alternating flooded and de-watered conditions on the upper and lower edges of the wetlands decreased wetland area and the diversity of plant and wildlife communities. The St. Lawrence River is a focal point for a strong resort residential and tourist economy. Like other parts of the Great Lakes system, this has brought with it shoreline development, road construction, and dredging and filling associated with marina development and operation.

6.9 Types of Lands to be Acquired Under CELCP:

Land acquisition projects under the CELCP may conserve lands within any of the types of environments described above, ranging from pristine undeveloped lands to lands that were previously developed but that can provide opportunities for conservation of important coastal values and features. For example, some parcels may offer extensive wetland and coastal forest habitat; others may protect shoreline features such as beaches and dunes. Some parcels may offer a variety of opportunities for passive recreation, while others may protect sites of historic or cultural significance. Appendix B lists the projects either funded to date or proposed for

funding, and identifies the acreage to be acquired and the types of uses proposed for the land (e.g., habitat protection, open space, public access and recreation). The geographic boundary of the CELCP may extend from the shoreline inland to the upstream/upland areas considered to be within the "coastal watershed" boundary. Consequently, some projects may be located more than 30 miles inland. For some states, this boundary extends beyond a state's official coastal zone management boundary depending on the definition of the state's coastal boundary, but encompasses lands still considered important to the health of coastal resources.

6.10 National Estuarine and Research Reserve System Land Acquisitions

The NERR System is a network of protected areas established for long-term research, education and stewardship. This program, carried out in partnership between NOAA and coastal states, protects more than one million acres of estuarine land and water. The NERR System provides essential habitat for wildlife, offers educational opportunities for students, teachers and the public, and serves as living laboratories for long-term research and monitoring of estuarine systems.

The Reserve System represents the range of estuarine environments within the U.S. coastline. These environments are classified into biogeographic regions and subregions. Table 2, below, identifies the biogeographic regions currently represented within the NERR System, as well as the total acreage of each Reserve.

A Reserve is designated following a full public review process and development of a comprehensive EIS. Reserve sites range from relatively small areas of hundreds of acres to larger sites encompassing thousands of acres. NERRs are owned and managed by State government agencies. Sometimes, a proposal may arise to add additional parcels of property either within or adjacent to a NERR site. In situations where a willing seller wishes to add to the conservation of the NERR site, a determination will be made as to whether the additional property to be acquired meets the criteria of a CE under this PEA, or if a supplemental EA or EIS is required.

Table 2. Reserve Designation Dates, Acreage and Biogeographic Regions

Reserve	Year	Acreage	Sq. Mi	Sq. Km	Region
South Slough, OR	1974	4,779	7.0	18.2	Columbian (7)
Sapelo Island, GA	1976	6,110	9.5	24.7	Carolinian (7)
Rookery Bay, FL	1978	110,000	171.9	445.2	West Indian (10)
Apalachicola Bay, FL	1979	246,000	385.6	998.6	Louisianan (11)
Elkhorn Slough, CA	1980	1,400	2.2	5.6	Californian (15)
Padilla Bay, WA	1980	11,000	16.7	43.3	Columbian (19)
Naragansett Bay, RI	1980	4,259	6.7	17.2	Virginian (3)
Old Woman Creek, OH	1980	571	0.9	2.3	Great Lakes (21)
Jobos Bay, PR	1981	2,883	4.4	11.3	West Indian (9)
Tijuana River, CA	1982	2,513	3.9	10.2	Californian (14)
Hudson River, NY	1982	4,838	7.6	19.6	Virginian (3)

(4 components)					
North Carolina (4 components)	1982, 1991	10,000	15.6	40.5	Carolinian (6)
Wells, ME	1984	1,600	2.5	6.5	Acadian (2)
Chesapeake Bay, MD (3 components)	1985, 1990	4,820	7.5	19.5	Virginian (5)
Weeks Bay, AL	1986	6,016	13.3	34.6	Louisianan (11)
Waquoit Bay, MA	1988	2,600	3.5	9.1	Virginian (3)
Great Bay, NH	1989	5,280	8.3	21.4	Acadian (2)
Chesapeake Bay, VA (4 components)	1991	4,435	6.9	17.9	Virginian (5)
Ace Basin, SC	1992	134,710	213.4	552.8	Carolinian (7)
N. Inlet Winyah Bay, SC	1992	12,327	19.3	49.9	Carolinian (7)
Delaware	1993	4,930	7.7	20.0	Virginian (4)
Jacques Cousteau, NJ	1998	114,665	178.1	461.3	Virginian (4)
Kachemak Bay, AK	1999	365,000	570.3	1477.1	Fjord (25)
Grand Bay, MS	1999	18,400	28.1	72.8	Louisianan (12)
GTM, FL	1999	55,000	85.9	222.6	Carolinian (8)
San Francisco Bay, CA	2003	3,710	5.8	15.0	Californian (16)

7. IMPACTS

Implementation of the CELCP will result in the acquisition of lands (including submerged lands) from private land holders willing to sell their property for conservation purposes. Some of the land to be acquired will be pristine or relatively undeveloped. Some land may already have been previously altered for agricultural or commercial uses; but still retains functions or characteristics that are valuable for natural resource conservation or coastal recreation purposes. Lands acquired under the CELCP, NERRS or FWCA will be owned by a State or local government or other eligible public agencies, not by the Federal government. In some cases, a public agency may contract with a non-governmental organization, such as the Trust for Public Land, to complete a land transaction; however, title will ultimately be transferred to the State and local government agencies for long-term conservation and management.

Lands acquired through the CELCP, NERRS or FWCA will result in activities that NOAA considers to be consistent with conservation purposes, including:

- restoration and enhancement, such as vegetative erosion control or restoration of natural water flow to the area;
- resource protection for coastal habitats and species through preservation of open space, greenways, parks, barrier islands or other specific habitat types;
- public access for passive recreational activities, including hiking, bird watching, hunting, fishing, swimming, canoeing and kayaking, as well as for research and educational opportunities.

For the purposes of discussing the impacts of the CELCP, the various categories of awards are being broken down into five types of lands uses: (1) recreation and open space; (2) habitat conservation/protection; (3) wetland conservation/restoration and preservation of water quality; (4) public access; and (5) recreation and cultural preservation. In many cases, there are multiple land uses for one property. For example, a property purchased for wetland habitat restoration may also be used for passive recreation, as well as water quality improvements. Appendix B provides a complete list of all the grants that have been awarded under the CELCP to date. In addition, below is a chart that provides an overall summary of the level of funding provided by the Federal government, and associated acreage protected for these various uses.

Table 3. Statistical Summary of CELCP Projects FY 2002 – FY 2004

# of Projects	Land Use	# of Acres	Federal Funding Amount (requires 50% match)
29	Recreation and Open Space	14,898	\$45,354,806
23	Habitat Conservation/Preservation	2,845 +*	\$29,029,591
7	Wetland Conservation/Restoration	1,989 +	\$ 7,406,121
9	Access	32.43 +	\$ 5,701,167
1	Recreation and Cultural Preservation	277	\$ 989,477
1	Preserve Water Quality	125-200	\$ 989,177

*In several cases, the grant recipients have not yet identified land to be purchased, therefore, this figure for acreage is potentially much lower than the actual final figure.

In general, the overall impact of land acquisitions under the CELCP, NERRS or similar authorities will be positive. Anticipated positive environmental impacts associated with conserving open space include improved water and air quality, habitat protection, moderation of climatic change, conservation of soil and water, and preservation of genetic diversity. There are potential long-term positive economic and standard of living impacts for communities, as well as potential negative impacts such as short-term decreases in local tax-base revenues. These are discussed in more detail below.

7.1 Environmental Impacts

7.1.1 Water Quality

Water pollution from development is well documented. Development increases pollution of rivers and streams, as well as the risk of flooding. Paved roads and roofs collect and pass storm water directly into drains instead of filtering it naturally through the soil. Septic systems for low-density subdivisions can add untreated wastes to surface water and groundwater, potentially yielding higher nutrient loads than livestock operations. Development often produces sediment and heavy metal contamination and other pollutants such as road salt, oil leaks from automobiles, and runoff from lawn chemicals that lead to groundwater contaminations. It also decreases recharge of aquifers, lowers drinking-water quality and reduces biodiversity in streams. (Farmland Information Center, 2005) Communities nationwide face billions of dollars

in expenses to treat polluted drinking water. Currently, 36 million Americans drink water from sources that violate EPA contaminant standards, and the agency has estimated that \$140 billion will be needed over the next 20 years to make drinking water safe. (The Trust for Public Land, 2)

CELCP will improve communities' abilities to acquire watershed lands that protect water quality, and ultimately assist them economically by saving them money on the cost of filtration. More and more communities are realizing that keeping water clean is almost always cheaper than cleaning it. For example, Lake County Ohio is receiving \$195,000 in CELCP funds and leveraging another \$195,000 to purchase 35.5 acres of land in the Grand River watershed to protect water quality. The property is 30 miles east of Cleveland, and is contiguous to an 835-acre undeveloped park that contains predominantly beech-maple hardwood forest, forested floodplain and hemlock ravines. In addition, the site contains several state-listed threatened and endangered species. The Grand River is widely recognized as one of the highest quality tributaries draining into Lake Erie. The primary threat to the health of the Grand River watershed is commercial and residential development and the resulting increase in imperviousness. Under a different land acquisition program, New York City is spending \$1.5 billion to protect 80,000 acres of upstate watershed. However, if New York City had not protected those 80,000, and allowed them to be developed, it would have cost the City between \$6 and \$8 billion to build a water filtration plant to provide the same function as those 80,000 acres, as well as an additional \$300 million a year to operate the plant. (The Trust for Public Land, 2)

7.1.2 Wetlands

Wetlands serve several important hydrologic and biogeochemical functions, and provide for maintenance of habitat and the food web. Their important functions include ground water recharge, ground water discharge, flood flow alteration, shoreline and sediment stabilization, sediment and toxicant retention, nutrient removal and transformation, food chain support and export of production, wildlife diversity and abundance, diversity and abundance of aquatic life, uniqueness and heritage significance, and recreational uses. The estimated value of all economic benefits generated by a single acre of wetland (or the benefits derived from that acre of wetland by society) has been set at between \$150,000 and \$200,000. (The Trust for Public Land, 2)

Wetlands may occupy only a small proportion of the watershed in which they lie, yet they often maintain exceptional biodiversity and process a large proportion of the dissolved and suspended materials leaving uplands, which typically occupy greater areas. When wetlands are removed, their collective functions are likely to decrease faster than the rate of reduction in surface area. However, many wetland functions and their associated value depend on the connections among and between wetlands and adjacent aquatic and terrestrial systems; i.e., the natural corridors that serve as migratory routes for fish, birds, mammals, and reptiles. The CELCP will positively impact wetlands not only through direct purchase of wetland areas themselves, but also purchase of areas that may serve as important buffers to wetlands on a landscape scale.

For example, Buffalo Bend, Texas has received a CELCP grant to purchase 10.158 acres of land along the Buffalo Bayou, part of which will be restored as a functioning wetland. The property has 1,000 feet of frontage along the south bank of Buffalo Bayou, less than a mile

upstream of the Turning Basin of the Houston Ship Cannel. The land is currently under development pressure for commercial or high-density residential development. A small gully formerly ran through the property to the bayou and will make an ideal site for a fresh/brackish water wetland restoration project. Conserving the Buffalo Bend project site will allow for restoration of wetland habitat along the bayou, increased wildlife habitat, and contribute to water quality improvements and natural flood control benefits. The project will also provide opportunities for passive recreation and nature appreciation and education.

On a much larger scale, the CELCP is funding the purchase of a 706 acre property in San Pablo Bay, California, located in northern San Francisco Bay, which was originally zoned for a 424-home development. The property contains diked seasonal wetlands that will be restored to tidal wetlands through breaching of the dikes. Since tidal wetland is one of the most threatened habitats of San Francisco Bay (see above discussion under Section 6.5.1, Northern California Subregion), this project will contribute significant benefits to the Bay ecosystem. Wetland restoration will provide habitat for a number of important estuary species that are endangered or threatened including the California clapper rail and the salt marsh harvest mouse (both listed as Federal endangered species), and various shorebirds, among others.

7.1.3 Air Quality

The CELCP will have a neutral impact on air quality. The typical new development pattern results in new roads, additional community growth, sprawl, traffic, and a parallel increase in air pollution. By purchasing open space and preserving it in perpetuity, the CELCP is ensuring that the land will remain undeveloped, and air-pollution reducing benefits associated with open space, such as trees, which absorb carbon dioxide and other greenhouse gasses, are likely to remain in place. In addition, if land is left undeveloped, then a community will not have to pay for the restoration of loss in air quality related to development of that land. As indicated in Table 3, between 2001 and 2004 the CELCP has provided grants that will preserve almost 17,000 acres of land for open space.

7.1.4 Habitat

The CELCP will improve states' ability to address the loss of habitat lands to development. Development fragments and often destroys wildlife habitat, and fragmentation is considered a principal threat to biodiversity. (Farmland Information Center, 2005) Fragmentation generally results in the remnant areas of native vegetation surrounded by a matrix of agricultural or other developed land. It causes loss of connectivity, ecotones, corridors, and the meta population structure. Connectivity can exert strong influences on ecological processes such as the movement and dispersal of an organism, the use of resources by animals, i.e., corridors, the gene flow, and spread of disturbance. Changing the landscape patterns through fragmentation can disrupt ecological processes that depend on movement within the landscape, impairing migratory species. (Roy and Joshi, 2005) Open areas, in contrast, preserve large, contiguous land areas that support species function and health. For example, by retaining wilderness as open space, states are preventing other uses of the land, such as logging and road building, which could result in the destruction of fish habitat through water degradation.

In the case of the CELCP grant to San Pablo Bay, California mentioned above, the site is one of the few remaining areas in the estuary where an undeveloped upland area remains along the Bay shoreline, so protection of the adjacent uplands will provide refuge for these and other species. The property is also in close proximity to publicly owned wetland areas, including Rush Creek, Cemetery Marsh, Black John Slough, and the 2,000 acre Petaluma Marsh, the largest tidal marsh in the state, which has never been diked. It is also close to a property known as Hamilton Field, a 1,000-acre former Army airfield recently acquired by the State of California for restoration. When the CELCP site is restored and added to these other marsh acreages, there will exist greatly increased, unfragmented habitat for species that use or are dependent on tidal marshes, including the more than one million migratory waterfowl and shorebirds traveling on the Pacific Flyway.

7.1.5 Public Access

Development often results in the loss of many of the benefits of open space: enjoyment of aesthetics and public access. However, many of the CELCP projects will increase areas associated with state or local park and reserve systems designed to support low-intensity public recreation uses. The potential sites to be acquired may be available to local communities, research and academic institutions, and school systems for study to gain a better understanding of the functions of local ecosystems and how they fit into larger systems, particularly through the NERRs. Access is encouraged under the CELCP for the following activities: hiking, hunting, fishing, swimming, kayaking, canoeing, research, and educational activities. Applicants are unable to purchase lands that completely restrict access to specific persons (i.e., non-residents of the community).

CELCP will have an overall positive impact by increasing the public's access to more open space, as appropriate. So far, nine of the CELCP projects have provided funding specifically for increasing public access. For example, in Stamford, Connecticut, the City will use CELCP funds to acquire eight contiguous vacant lots along the eastern bank of the Mill River in downtown Stamford that were previously slated for development of a 15-story apartment building. Now the lots will be used as part of the "Mill River Corridor Park" under the Stamford Master Plan. The plan calls for creating a 26-acre greenway along a 1.9-mile stretch of river. Included in the plan is the establishment of a "central park," the creation of bike and walking paths along the river, and the construction of three pedestrian bridges. Acquisition of the property will expand the existing Mill River Park and add open space to the proposed corridor. In another example, Hempstead, New York will receive CELCP funds to purchase a 4.17 acre parcel of undeveloped waterfront to construct a passive recreational shoreline trail. This acquisition will allow Hempstead to further consolidate public ownership of the western shorelines of Hempstead Harbor, and continue construction of a trail that it started on a northern parcel. The site is also a New York State significant coastal fish and wildlife habitat, and the fringe of wetlands within the parcel will be protected and remain open space.

While lands acquired with CELCP funds include access to the general public, access may be limited or controlled in an equitable manner for resource protection, public safety, or for other reasonable cause. The property must be managed in a manner that is consistent with the purposes for which it was entered into the program and can not convert to other uses. As a

condition of the grant award, a strategy for long-term stewardship must be developed for each project that identifies the entity(ies) responsible for ongoing stewardship, including financial or staff support, and monitoring of conservation easements or ongoing activities to ensure that they are consistent with long-term conservation. Based on the requirements of the CELCP with respect to providing public access, it is anticipated that for those areas equipped to handle public access, there will be no additional negative impacts, and environmentally-sensitive areas will be protected as necessary.

7.1.6 Impacts of Minor Construction Projects Potentially Allowed by CELCP

Depending on the proposed use of the property and the site's environment, minor construction for facilities such as restrooms or boardwalks may be allowed. Their purpose would be to facilitate public access and minimize harm to coastal resources due to public access and recreation. If such activities are proposed, NOAA will review them on a case-by-case basis to determine whether additional information or analysis is needed to comply with NEPA. If consultations or environmental reviews are not complete at the time of application for financial assistance, NOAA may place conditions on a grant award to ensure that such reviews or consultations are completed to NOAA's satisfaction before funds can be expended by the grant recipient.

Activities that are considered to be inconsistent with CELCP, and therefore are prohibited, include:

- active agricultural or aquaculture production;
- shoreline armoring or other hard erosion control structures;
- construction or expansion of roads, buildings or facilities except as noted above; or
- facilities for active recreation as sports facilities, water parks, playgrounds, or similar uses.

Under the authority of CZMA Section 315, the NERRS can acquire land to construct facilities for research, education, or administration of the program, such as visitors' centers, administrative offices, and laboratory or classroom space. Such proposals are subject to review on a project-by-project basis to determine potential environmental impacts and to ensure compliance with all applicable laws and regulations.

Therefore, funds for land acquisition will not result in significant impacts from construction. NOAA will review any proposed uses of properties to ensure that future uses are consistent with program purposes and compatible with long-term conservation.

7.2 Economic Impacts

The CELCP, NERRS and FWCA only fund the acquisition of property, or interests in property, from willing sellers. For example, the CELCP requires evidence that the owner of any proposed property is a willing participant in negotiation for sale of their property for conservation purposes. The purchase price for fee title or conservation easements is based on fair market value, determined through independent appraisals conducted consistent with Federal

appraisal standards for land acquisition. A landowner who donates property or sells property at a price below appraised fair market value may be able to receive some tax benefits for the donated land value.

Landowners enter into purchase agreements with the knowledge that in some cases, they may be able to get a higher price for their property if sold for purposes other than conservation. There is no way to financially assess or to require NEPA assessment on the difference between land owners' perceived estimates on the value of their land versus a rigorously appraised fair market value, should such disparity exist. There will always be a tendency by a landholder to negotiate the highest possible price, but government acquisition programs promise at least the fair market value determined by set appraisal methodology (i.e., through the Uniform Appraisal Standards for Federal Land Acquisition to include an "Offer of Purchase at Estimated Just Compensation," or the Uniform Standards of Professional Appraisal Practice).

In some cases, an acquisition project may fall through because negotiations failed to result in a mutually-agreeable price or other terms of sale. Even though states possess the power of eminent domain, NOAA will not allow CELCP funds to be used to acquire properties through condemnation (the use of eminent domain). Therefore, there is little risk of controversy or legal court battles over these acquisitions. If a project falls through, NOAA would redirect funds to other projects, as appropriate and consistent with applicable law or Congressional direction.

7.2.1 Local Revenue

One of the primary concerns frequently expressed by state and local governments or citizens of a community is the potential negative impact to the local tax base when land is acquired by a public agency and is no longer taxed, or is taxed at a much lower rate. It is true that lands purchased by a government entity or subject to conservation easements in perpetuity are often subject to lower property tax assessment because the land's highest and best use have been diminished permanently. In fact there may be two types of municipal costs associated with conservation: (1) the cost of acquisition; and (2) the cost of taxes foregone when the value or a portion of the value of protected land is removed from (or reduces) the property tax roles. This impact is highly variable and a function of the location of the site, amount of acres acquired, value of the land, and designated use of the land (e.g., whether originally zoned as commercial, residential, agricultural, etc.).

However, this only takes into consideration the revenue side of the budget of local communities, not the expense side of the budget equation. Conserving land can be likened to building a police station or a library; it is an investment in the community. (The Trust for Public Land, 3) Several "cost of community services studies" have been conducted nationwide, and their conclusions are that undeveloped and open lands (often those that are protected by conservation easements) ultimately require less, and therefore cost less in public services than do developed lands or other types of land uses.

A property's value increases when it is developed, hence adding taxable value to the town's tax base. However, associated with this development is a cost to town services. Depending on the type of development, the cost may ultimately outweigh the taxable base.

Based on several studies, it has been determined that the most likely type of development a community will experience is residential development, and this is almost always more costly for the town. Thus, while more residences mean more taxes received by the municipality, they also mean more costs (e.g., school, police, fire, etc.). It has been determined that initially, commercial or industrial development pays more in taxes than it costs the municipality to service. However, these towns also still had higher taxes than towns with conservation lands, due to the close link between high levels of commercial and industrial development in a town and the correspondingly high level of residents needed for labor supply. In addition, commercial and industrial developments tend not to appreciate as rapidly over time as residential property or open land. (The Trust for Public Land, 3)

Ultimately, it has been found that undeveloped land pays more in taxes than it directly costs the town to service. In a study conducted in Massachusetts, on average, tax bills were lowest in towns that have the most land per capita enrolled in land conservation programs. The study found that the towns that had the most permanently protected land, on average, had the lowest tax rates, while towns with the fewest lands in conservation had the highest rates. The conclusion of the Massachusetts study was that not only does land conservation not necessarily lead to high tax rates, but that it might actually be a tool to control property tax increases due to the net benefits associated with conserving land. (The Trust for Public Land, 3) These include:

- Environmental benefits or protecting the property
- Direct benefits to residents, including public access for recreation
- Improved quality of life; contributes to town's goals
- No impacts of likely alternative uses of the land
- Promote tourism or protect local resource-based industries
- Increase other property values.

Therefore, in the short-term, the permanent protection of land generally results in a negative local revenue shift. However, in the long-term, land conservation helps control property taxes by limiting increases in municipal services and improving quality of life. (Land Trust Alliance) State and local governments must weigh these factors when deciding whether to acquire additional lands for long-term conservation or for any other public use or benefit. Since the CELCP awards are fairly small scale and widely-scattered, it is unclear whether they are likely to have significant impacts one way or the other on local economies.

CELCP does not result in the transfer of lands into the Federal Property Book, or convey federal rights or actions on private property. Property is not subject to the Revenue-Sharing and the Payments in Lieu of Taxes Act of 1976 for entitlement lands (lands owned by the federal government and managed by natural resource management agencies). Therefore this is neither an impact nor a benefit associated with the CELCP or NERR acquisitions.

7.2.2 Value of Land Conservation

Coastal and estuarine land conservation is one way that open space can help communities and local, state, and the Federal government meet environmental goals in a cost-effective

manner. Land conservation provides the space for the environment to perform life-sustaining services that otherwise would have to be provided technologically at great expense, including: degradation of organic wastes, filtration of pollutants from soil and water, buffering of air pollutants, moderation of climatic change, conservation of soil and water, and preservation of genetic diversity. (The Trust for Public Land, 2) While the cost of protecting the functions of natural environments must be taken into consideration (e.g., the cost of regulatory programs, opportunity costs and replacement costs for those lands no longer available for development, etc.) there are clearly also costs associated with developing those lands that also have to be considered—loss of the value of natural function, as well as the additional burden of the costs to infrastructure associated with development and sprawl. As discussed above, ultimately, the CELCP is likely to have a positive impact on the economy of local communities by addressing the cost of pollution controls through natural functions.

7.3 Examples of Other Federal Agency Land Acquisition Programs

Examining similar land acquisition/conservation programs administered by other Federal agencies can provide some insight into the potential impacts from implementing the CELCP. Several Federal agencies have programs that support land acquisition or conservation through partnerships with state and local governments, and in some cases through partnerships with non-governmental organizations and/or private landowners. For example, the U.S. Department of Agriculture/Forest Service administers the Forest Legacy Program (FLP, 16 U.S.C. 2101 et. seq.), which began in 1990 and is currently funded at nearly the \$91 million mark for FY 2004. Since its inception, the expenditure of \$132 million has resulted in the protection of \$270 million through matching funds in forest lands. More than 606,000 acres of private woodlands have been protected from development through the program. The FLP is also based on a willing seller/willing buyer basis, which reduces the potential for social and economic conflict. Land is also not conveyed to the Federal government under this program. The Forest Service prepared a PEA and a Finding of No Significant Impact on the implementation of the FLP. (U.S. Forest Service, 1) To date, acquisition of individual Forest Legacy tracts and/or easements have not warranted the preparation of a separate EA or EIS, and all projects have qualified as CEs. (U.S. Forest Service, 2)

The National Park Service (NPS) within the Department of the Interior, implements the Land and Water Conservation Fund (LWCF). Established in 1965, this program supports land acquisition primarily for outdoor recreation and is funded through revenues generated from oil and gas leases. The level of funding has varied over the years, but has reached as high as \$900 million a year with funds provided for both Federal and state acquisition. The NPS funds as many as 450-500 projects under the LWCF annually. State acquisition projects have qualified as CEs with environmental assessments conducted on only a few unusual projects (e.g., land swapping for original designated sites that were protected in perpetuity but generated considerable community concern). (National Park Service) LWCF projects also require a willing seller/willing buyer and do not use condemnation proceedings to acquire the property, thereby avoiding displacement of persons or businesses.

After years of implementation, it is evident from both the FLP and the state portion of the LWCF acquisition programs that the environmental consequences of such acquisitions are

considered positive, with few to no negative associated impacts. Ultimately the majority of the environmental reviews qualify for CEs.

8. Compliance with Other Environmental and Administrative Review Requirements

The approval of plans under this program and award of financial assistance are federal activities subject to authorities such as the NEPA, and the federal consistency provisions of the CZMA. NOAA is responsible for ensuring that projects comply with these and other relevant authorities. Compliance with these authorities will result in few environmental, social, and economic negative impacts.

8.1 National Flood Insurance Program (NFIP)

While many of the proposed acquisitions will be located in floodplains in whole or in part, federal land acquisition funding under the CELCP, NERRS or FWCA will not result in construction of buildings in the floodplain. The NFIP prohibits the use of funds for acquisition or construction of buildings in special flood hazard areas in communities that are not participating in the Flood Insurance Program, as identified in the NFIP's Community Status Book. Construction of buildings is not an eligible use of CELCP funds. A community is not precluded from proposing projects within the floodplain for conservation purposes.

8.2 Coastal Barriers Resources Act (CoBRA)

In order to receive federal funds, all proposed projects located on undeveloped coastal barriers designated in the CoBRA system must be consistent with the purposes of minimizing: the loss of human life; wasteful federal expenditures; and damage to fish, wildlife, and other natural resources. For projects in these areas, OCRM must consult with the regional office of the U.S. Fish and Wildlife Service (USFWS) and allow 30 days for them to determine whether the project is consistent with CoBRA. Because OCRM defers to their opinion in these cases, some projects or grant awards may be conditioned pending the results of the consultation process.

8.3 Endangered Species Act

Some projects will contain lands and habitats used by endangered species. Applicants are required to indicate whether they believe that a proposed acquisition may affect threatened or endangered species or critical habitat as defined by the Endangered Species Act (ESA), and state the basis for their conclusion. Impacts can be assessed as positive or negative. Many applications answer "yes" to this question noting positive benefits to the species or their habitats. If a proposed acquisition may have minor and temporary effects, OCRM will first informally consult with the relevant federal agency, either the USFWS or NOAA's Marine Fisheries Service (NMFS), depending on the species in question. If a proposed acquisition may significantly affect threatened or endangered species or critical habitat, OCRM will consult with the applicant regarding further steps that may need to be taken. If the applicant still wants to proceed, OCRM will enter into formal consultation with the USFWS or NMFS, pursuant to section 7 of the ESA.

OCRM will not approve a proposed acquisition that the USFWS or NMFS has determined will adversely and significantly affect threatened or endangered species or critical habitat.

8.4 Magnuson-Stevens Fishery Conservation and Management Act

The Magnuson-Stevens Act requires that federal agencies consult with NMFS regarding any action authorized, funded, or undertaken that may adversely affect essential fish habitat (EFH) for federally managed fish. Consultation is generally initiated when a federal agency notifies NMFS of an action that may adversely affect EFH, and provides NMFS with an assessment of the action. In response, NMFS provides Conservation Recommendations to avoid, minimize, mitigate, or otherwise offset adverse effects on EFH. OCRM would provide a detailed response in writing to NMFS that includes proposed measures for avoiding, mitigating, or offsetting the impact of the proposed activity on EFH. If OCRM chooses not to adopt NMFS' EFH Conservation Recommendations, it must provide an explanation. EFH consultation and coordination should be consolidated, where appropriate, with interagency consultation, coordination, and environmental review procedures required by other statutes. Consultation procedures are outlined at 50 CFR 600.920.

8.5 Coastal Zone Management Act of 1972 (CZMA)

Section 307 of the CZMA requires that federal activities (including financial assistance projects) should be certified by coastal states and territories with approved coastal management programs under the Act that the activity is consistent with the enforceable policies of the program. Prior to the grants being awarded, all proposals must be certified by the State Coastal Management Agency that the acquisitions are consistent with the policies of the respective coastal management programs.

8.6 National Historic Preservation Act (NHPA)

Under the provisions of Section 106 of the National Historic Preservation Act of 1966, the Secretary of the Interior has compiled a national register of sites and buildings of significant importance to America's history. Before submitting an application, the applicant must determine whether land acquisitions or other grant-supported activities will affect a property listed on the national register. If so, the applicant must obtain clearance from the appropriate State Historic Preservation Office before submitting the application. OCRM and the applicant would work to ensure there is full compliance with the NHPA.

8.7 Americans with Disabilities Act

As a general rule, no qualified individual with a disability shall be subject to discrimination or be excluded from participation or benefits of the services, programs, or activities of a public entity. The ADA does not address issues of handicapped accessibility for outdoor recreation projects and public access projects that are needed to reduce harm to natural resources. Each project shall be handicapped accessible to the extent that conditions allow. Any construction associated with projects that provide for recreation, using funds other than CELCP, shall be handicapped accessible unless the construction of a handicapped accessible structure

would damage coastal resources. Requirements for handicapped accessibility for the ADA are based on 42 U.S.C. 12101 et. seq., and the U.S. Architectural and Transportation Barriers Compliance Board.

8.8 Uniform Relocation Assistance and Real Property Acquisitions Policies Act of 1970

This Act, Public Law 91-646, as amended, (42 U.S.C. 4601 et. seq.) requires certain assurances for projects conducted by a state agency or its agent that involve the acquisition and/or modernization of real property or cause the displacement of persons, businesses, or farm operations. Because CELCP only supports acquisition of property or interests in property from willing sellers, it is not anticipated that this program will result in any displacements. In cases of displacement, P.L. 91-646 requires that applicants ensure that fair and reasonable relocation payments and advisory services will be provided to any displaced persons and that safe, decent, and sanitary replacement dwellings will be available to such persons within a reasonable period of time prior to displacement. The state agency must be guided by the real property acquisition policies of the Act, and the property owners must be paid or reimbursed for necessary expenses as specified in the Act. The Act provides for an exemption to the appraisal, review and certification rules for "voluntary transactions" that meet the conditions specified at 49 C.F.R. 24.101(a)(1), including written notification to the owner that the agency will not acquire the property in the event negotiations fail to result in an amicable agreement. Department of Commerce regulations implementing the Act can be found at 15 CFR Part 11.

8.9 Environmental Justice

Consistent with the President's Executive Order on Environmental Justice (Feb. 11, 1994) and the Department of Commerce's Environmental Justice Strategy, it is unlikely that implementing the CELCP will have disproportionately high and adverse human health or environmental effects on minority or low income populations. In fact the CELCP should result in an increased amount of open space being made available for public access purposes, which may positively benefit low income and minority populations.

8.10 Executive Order 12866

Implementation of the CELCP does not constitute a "significant regulatory action" as defined by Executive Order 12866 because: (1) it will not have an annual effect on the economy of \$100 million or more, or adversely affect in a material way the economy, a sector of the economy, productivity, competition, jobs, the environment, public health or safety, or State, local or tribal governments or communities; (2) it will not create a serious inconsistency or otherwise interfere with an action taken or planned by another agency; (3) it will not materially alter the budgetary impact of entitlements, grants, user fees, or loan programs or the rights and obligations of recipients thereof; and (4) it will not raise novel legal or policy issues arising out of legal mandates, the President's priorities, or the principles set forth in the Executive Order.

8.11 Commerce Pre-Award Notification Requirements for Grants and Cooperative Agreements

The Department of Commerce has published in the *Federal Register*, October 1, 2001 (66 FR 49917), as amended October 30, 2002 (67 FR66109), a set of requirements that are applicable to all federal financial assistance awards issued by the Department. These will be addressed as Special Award Conditions on financial assistance awards.

9. FINDING OF NO SIGNIFICANT IMPACT CRITERIA

NOAA Administrative Order (NAO) 216-6 (revised May 20, 1999) provides eleven criteria for determining the significance of the impacts of a proposed action. These criteria are discussed below with respect to the proposed action (Alternative 1).

1. Impacts may be both beneficial and adverse—a significant effect may exist even if the Federal agency believes that on balance the effect will be beneficial.

After three years of implementing the CELCP, no significant adverse environmental impacts have been identified and elevated for further NEPA review. Beneficial impacts will result as specific parcels of land and water resources are acquired but because of the dispersal of projects through the Nation's coastal areas, it is unlikely that the program will result in major and significant beneficial impacts to any one localized area or region unless the scale of funding for acquiring acreage is significantly increased.

2. What is the proposed degree to which public health or safety is affected by the proposed action?

No negative impacts to public health and safety are associated with CELCP implementation. At a minimum, acquiring and preserving open space will result in protecting the environmental status quo of an area, and could preserve it from future environmental degradation.

3. Are there unique characteristics of the geographic area in which the proposed action is to take place?

CELCP acquisitions represent a wide variety of environments from pristine, undeveloped lands and water resources to those that have been highly modified to achieve economic objectives. Because the purposes of CELCP are to protect important coastal and estuarine areas for conservation, recreational, ecological, historic or aesthetic values, there will be many cases that the acquired sites will be considered geographically unique or representative.

4. What is the degree to which effects on the human environment are likely to be highly controversial?

The effects on the human environment as discussed in this PEA are primarily positive. The only potentially controversial issue is the short-term loss of value of land to the local tax base, which may be off-set by the added value to lands surrounding conservation areas. It is not anticipated that the land acquisitions themselves will be highly controversial because all actions will be through willing sellers. No condemnation through eminent domain is authorized by the program.

5. What is the degree to which effects are highly uncertain or involve unique or unknown risks?

There are no uncertain, unique, or unknown risks associated with the implementation of the CELCP.

6. What is the degree to which the action establishes a precedent for future actions with significant effects or represents a decision in principle about a future consideration?

Individual actions implemented through CELCP may result in additional actions taken in the future (i.e., the acquisition of additional parcels of land through CELCP or other acquisition funding programs). However, there is a long history of these types of programs offered by the Federal and state governments, so the CELCP itself is not considered a precedent-setting program likely to result in significant effects representing a singular decision in principle about future considerations.

7. Does the proposed action have individually insignificant but cumulatively significant impacts?

Implementation of the CELCP is designed to have no significant adverse environmental impacts, either singly or cumulatively, but should result in positive environmental impacts through the awarded grants.

8. What is the degree to which the action adversely affects entities listed in or eligible for listing in the National Register of Historic Places, or may cause loss or destruction of significant scientific, cultural, or historic resources?

The proposed action will not adversely affect any entity listed in or eligible for listing in the National Register of Historic Places, nor will the proposed action cause the loss of or destroy any significant scientific, cultural, or historic resources. Should a proposed action be designed to increase public action or public education/outreach efforts in facilities or locations that are on the Registry, appropriate consultation with appropriate State Historic Preservation Officers will be conducted to ensure no adverse impacts occur to such facilities or if they are to be restored, that the facility meets historic preservation requirements. One of the purposes of CELCP is to protect lands and resources for their historic values.

9. What is the degree to which endangered or threatened species, or their critical habitat as defined under the Endangered Species Act of 1973, are adversely affected?

No adverse actions are anticipated. While not all acquisitions will be located in endangered species habitat, some of the acquisitions to date have been for the purpose of increasing the protection of endangered species and endangered species habitat by increasing the amount of habitat available in managed areas.

10. Is a violation of Federal, state, or local law for environmental protection threatened?

No. Violation of environmental laws and regulations has not occurred over three years experience and none is anticipated in the future. Any proposed activity that might propose such a threat would not be funded or would have to be mitigated prior to funding.

11. Will the proposed action result in the introduction or spread of a non-indigenous species?

No. In some cases, once property is acquired by State or local governmental resource agencies, activities to stop the spread or removal of non-indigenous species through other funding activities is possible.

10. FINDING OF NO SIGNIFICANT IMPACT STATEMENT

A review and analysis of the land acquisition grant applications submitted during FY 2002 through FY 2004 by a wide variety of applicants for more than 60 projects leads to the finding that there will be no significant adverse environmental impacts to the human environment associated with CELCP implementation and FWCA acquisition projects. The purpose of CELCP is to protect important coastal and estuarine areas that have significant conservation, recreation, ecological, historical, or aesthetic values, or that are threatened by conversion from their natural or recreational state to other uses, giving priority to lands which can be effectively managed and protected and that have significant ecological value. In achieving these objectives, some projects will lead to changes in future potential land use, for example, from residential or commercial uses to conservation land, but not of a scope and scale to be considered significant and adverse. All projects have been found to be consistent with existing approved State Coastal Zone Management Program objectives, policies, and appropriate standards ensuring the requirement to minimize any potential adverse impacts to coastal resources.

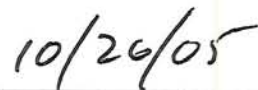
All CELCP, CZMA NERR supplemental acquisitions, and FWCA projects are categorically excluded because they do not normally have the potential for a significant impact on the quality of the human environment and undergo individual review to ensure all environmental requirements are satisfied with respect to consultation, coordination, permits (if any), site assessments or other requirements.

Notwithstanding this, a separate review and assessment will be conducted if individual reviews indicate that a proposal: exceeds the generic impacts described in this EA; is extremely controversial; or appears not to satisfy all environmental requirements, such as endangered species or historic preservation requirements. Some grant applications do not contain all the information necessary on which to make a final environmental review and will receive conditional approval until such time as all required information is submitted and a final environmental review is completed.

Having reviewed this environmental assessment and the available information relating to the proposed action, I have determined that there are no significant adverse environmental impacts resulting from the implementation of the CELCP or of similar conservation-related land acquisition projects under authority of the NERRS or FWCA. Preparation of an environmental impact statement on CELCP plan approvals is not required by Section 102(2) (c) of the National Environmental Policy Act or its implementing regulations.



Charles W. Challstrom
Acting Assistant Administrator for Ocean Services and
Coastal Zone Management, NOAA



Date

11. List of Agencies and Persons Consulted

National Park Service regarding environmental screening for Land and Water Conservation Fund acquisitions including the use of a Categorical Exclusion Form

Michael D. Wilson (May 2004)

Pat Gillespie (May 2004)

USDA Forest Service, Cooperative Forestry regarding environmental impacts associated with acquisitions under the Forest Legacy Program

Rick Cooksey (April 2004)

12. LIST OF PREPARERS

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Appendix A

CELCP Project Application Checklist

(Original format modified to illustrate information requested of applicant only)

The project applicant must complete and sign this Project Checklist and submit it to the National Oceanic and Atmospheric Administration, along with the other required application materials, in order to receive approval of a project.

Applicant and Project Information

1. Award Number: [provided by NOAA]
2. Project Title: _____
3. Project Location (Approximate): (City, County, Major Intersections)
4. Project Applicant (Must be a public entity at the state or local level): _____
5. Total Cost: \$ _____

CELCP Federal share (requested amount): \$ _____
State/Local Match Contributions: \$ _____
Other Federal \$: \$ _____
Other Non-Federal \$: \$ _____

I ATTEST TO THE FOLLOWING: (1) THE STATEMENTS MADE AND OTHER INFORMATION PROVIDED IN THIS CHECKLIST ARE, TO THE BEST OF MY KNOWLEDGE, TRUE AND ACCURATE; (2) THE RECIPIENT HAS ON FILE THE DOCUMENTS IDENTIFIED IN THIS CHECKLIST; AND (3) I UNDERSTAND THE CONSEQUENCES OF NON-COMPLIANCE WITH THE SPECIAL AWARD CONDITIONS THAT WILL BE PLACED ON THIS GRANT.

Date

Name of Signatory (please print or type): _____

Title: _____

Address: _____

Phone Number: _____

6. **Project Description:** (briefly describe the nature of the project, location, expected benefits, role of partnerships in the project, other information required in section 4.2 of the guidance, and any explain special circumstances noted elsewhere on the checklist.)

7. **Project Eligibility:** (Check all that apply)

The proposed project:

- _____ is located in a coastal or estuarine area included within a state's approved coastal and estuarine land conservation (CELCP) plan;
- _____ matches federal funds with non-federal funds at a ratio of 1:1;
- _____ will be held in public ownership and provide conservation in perpetuity;
- _____ will provide for access to the general public, or other public benefit, as appropriate and consistent with resource protection;
- _____ protects important coastal and estuarine areas that have significant conservation, ecological, historical, aesthetic, or recreation values, or that are threatened by conversion from their natural or recreational state to other uses;
- _____ can be effectively managed and protected;
- _____ directly advances the goals, objectives, or implementation of state coastal management plan or program, NERR

management plans approved under the CZMA, national objectives of the CZMA, or a regional or state watershed protection plan involving coastal states with approved coastal management plans; and _____ is consistent with the state's approved coastal management program.

8. Land Acquisition

For land acquisition projects,

- a. What are the legal rights that will be acquired? _____ Fee title _____ Easement _____
_____ Other (please explain) _____
 - b. If an easement, what is the life of the document? _____ In perpetuity
_____ Duration (please specify, e.g., in years) _____
 - c. What public agency or entity will hold title to the land?

 - d. Is a long-term stewardship or management strategy attached that describes the proposed method for ensuring long-term operations, maintenance, and safety needs related to the property? _____ Yes _____ No
 - e. What type of activities/uses currently exist or are envisioned on the property?

 - f. Will the recipient contract with a private or non-profit organization to complete part or all of this project. _____ Yes _____ No
If Yes, the name of the organization is: _____
9. What is the acreage of the proposed project or property to be acquired (via fee title or easement)?

10. What values are contained within the proposed project or property to be acquired?
Ecological – what type of habitats, species, or other features of significant ecological value are contained on the property? (include acreage where appropriate)

- Historical – what historical features of significant value are contained on the property?

- Aesthetic – what is the aesthetic value of the property? what significant contribution does this property make to the aesthetic character of the surrounding area?

- Recreational – what is the property's significance with regard to coast-dependent or nature-based recreation?

- Conservation – What values does this land provide in terms of establishing linkages or corridors among existing conservation lands, filling conservation gaps in the geographic area, or protecting land from converting to other uses.

11. Public Benefit:

- a. The acquisition will be publicly held or under publicly controlled easement and is for public benefit. The project does not improve private property for private or commercial gain. ☐ Yes ☐ No
- b. The property will be accessible to the general public. ☐ Yes ☐ No
- c. If the answer to 6.b. is No, check any of the following reasons that apply and explain why access to the property will be limited.
☐ Public Safety ☐ Resource Protection ☐ Geographically Isolated/Inaccessible
☐ School Outings ☐ Scientific Research ☐ Other (Please explain.) _____
- d. The property will be leased or rented. ☐ Yes ☐ No If yes, please explain. _____
- e. The public will be charged a user fee for access to or activities on the proposed property.
☐ Yes ☐ No
- If Yes, please attach a description of the user fee that includes: how much, differential fees (if any), the need for the fees, and proposed use of the revenue.

12. Title Opinion and Appraisal:

- a. Documentation that the current owner is a willing participant in a process of negotiation for possible sale of property, or interests in property, for conservation purposes is attached. (This documentation may be in the form of a letter of willingness or intent, option letter, contract, or similar form.) ☐ Yes ☐ No
- b. The applicant has obtained and attached an independent appraisal.
☐ Yes ☐ No
- If No, the applicant has attached a good-faith estimate and justification of the cost for the project based on market value or agreement with the willing seller. ☐ Yes ☐ No
(Note: An appraisal will be required at the time the applicant submits a formal grant application to NOAA for projects that have been selected for funding. If the appraised value is higher than the estimated cost, the applicant will be required to make up the difference in cost.)
- c. A title opinion or certificate is attached (Note: A title opinion not required at this stage of the process, but will be required later for selected projects). ☐ Yes ☐ No

13. Site Location Map: Site location maps are attached. ☐ Yes ☐ No

Attach a map of the state or coastal county showing the general location of the project, and a map of the project site, which shows the location and extent of the proposed acquisition, as well as relationship to significant natural features (slope, wetlands, dunes, floodplains, access, etc.) and adjacent land uses.

14. State Historic Preservation Officer's (SHPO's) Clearance and National Historic Preservation Act:

- a. The project will affect properties listed on the National Register of Historic Places (www.cr.nps.gov/nr/), eligible to be listed, or otherwise protected by section 106 of the National Historic Preservation Act (www2.cr.nps.gov/laws/NHPA1966.htm) or a similar State Preservation Act. ☐ Yes ☐ No
- b. The Recipient has on file the SHPO's clearance. ☐ Yes ☐ No (If No, the Recipient certifies, by signing this checklist, that the SHPO clearance is being sought and that work will not begin and land will not be purchased until SHPO clearance is received by the Recipient.)

15. National Flood Insurance Program:

- a. Is the project located in a designated floodway or "V" zone on a National Flood Insurance Program Floodway Map (www.fema.gov/maps/)? ☐ Yes ☐ No
(If No, go to 16)

b. Is the community in which the project is located in special flood hazard areas shown on an FIA map is participating in the Flood Insurance Program (www.fema.gov/nfip). ____ Yes ____ No

16. Coastal Barriers Resource Act: The project is located on an undeveloped coastal barrier designated by the Coastal Barriers Resources Act (www.fws.gov/cep/cbrunits.html).
____ Yes ____ No

If the answer to 11. is Yes, attach to this checklist a brief analysis as to how the proposed project is consistent with the three CBRA purposes: to minimize (1) the loss of human life, (2) wasteful federal expenditures, and (3) damage to fish, wildlife and other natural resources.

17. Endangered Species Act: May the proposed project affect threatened or endangered species or critical habitat under the jurisdiction of the NOAA Marine Fisheries Service (NMFS) or U.S. Fish and Wildlife Service (USFWS) as defined by the Endangered Species Act? (endangered.fws.gov/) or (www.nmfs.noaa.gov/endangered.htm).
____ Yes ____ No

If the answer to 12. is No, please provide a brief statement explaining the basis for the conclusion. If the answer to 12 is Yes, attach a description of the effects (minor and significant effects), the species or habitat affected, and any coordination between the state and the USFWS or NMFS. OCRM will not approve a project that USFWS or NMFS has determined will significantly affect threatened or endangered species or critical habitat.

18. Magnuson-Stevens Fishery Conservation and Management Act.
Could the proposed project have significant adverse impacts on essential fish habitat for federally managed fish? ____ Yes ____ No

19. National Environmental Policy Act:

a. The proposed project may significantly affect the human environment.

____ Yes ____ No

b. The proposed project involves unresolved conflicts concerning alternative uses of available resources.

____ Yes ____ No

c. This action would have significant adverse effects on public health and safety.

____ Yes ____ No

d. This action will have highly controversial environmental effects. ____ Yes ____ No

e. This action will have highly uncertain environmental effects or involve unique or unknown environmental impacts. ____ Yes ____ No

f. The project will have significant adverse impacts on other natural resources not covered elsewhere in this checklist, e.g., beaches and dunes, wetlands, estuarine areas, wildlife habitat, wild or scenic rivers, reefs, or other coastal resources. ____ Yes ____ No

g. The project will have insignificant effects when performed separately, but will have significant cumulative effects. ____ Yes ____ No

If the answer to any one subpart of 19. is Yes, then an Environmental Assessment (EA) or Environmental Impact Statement (EIS) may be required. For items answered Yes, please attach a description of the resource(s) affected and the nature and scope of the effects.

20. Uniform Relocation Assistance and Real Property Acquisitions Policies Act of 1970. If the proposed project involves the acquisition and/or modernization of real property, will the proposed project cause the displacement of:

- | | |
|---------------------|--------------------|
| a. persons, | _____ Yes _____ No |
| b. businesses, or | _____ Yes _____ No |
| c. farm operations? | _____ Yes _____ No |

If yes to any of the above, please explain: the number of displaced persons, including businesses and farm operations; what fair and reasonable relocation payments and advisory services will be provided to any displaced persons; and what provisions will be made to ensure that safe, decent, and sanitary replacement dwellings will be available to such persons within a reasonable period of time prior to displacement.

21. Handicapped accessibility: Will the proposed project be handicapped accessible?

_____ Yes _____ No _____ N/A

If No, attach to this checklist an explanation as to how the project meets ADA handicapped accessibility requirements.

23. Environmental Justice. Will the project have disproportionately high and adverse human health or environmental effects on minority or low-income populations? _____ Yes _____ No

24. State, Local and Tribal Laws. The project is consistent with state, local, and tribal laws to protect the environment. _____ Yes _____ No

25. Required permits: Please list local, state, tribal, or federal permits required for this project and the status of the permits. If the permits have not been obtained, then the Recipient certifies, by signing this checklist, that the Recipient (or other public entity) is seeking the required local, state and federal permits and that work will not begin and land will not be purchased until the permits have been issued and received by the Recipient.

26. Public Coordination

Has the project for which you propose to use CELCP funds been subject to public scrutiny and coordination through a public notice or other public review process? _____ Yes _____ No

If "yes," please describe the results of that process and note when the coordination occurred.

If "no," please explain.

NOAA is requesting this information in order to adequately assess the eligibility of proposed projects. The public reporting burden for this collection of information is estimated to average 10 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Elaine Vaudreuil, OCRM, 1305 East-West Hwy (N/ORM), Silver Spring, Maryland 20910. This reporting is authorized under P.L. 107-77, and has been approved under OMB #0648-0459. Information submitted will be treated as public record. Notwithstanding any other provision of the law, no person is required to respond to, nor shall any person be subject to a penalty for failure to comply with, a collection of information subject to the requirements of the Paperwork Reduction Act unless that collection displays a currently valid OMB Control Number.

Appendix B.
Table 2.

Summary of Coastal and Estuarine Land Conservation Program (CELCP) Funding FY

Fiscal Year	State	County	Recipient	Project Title	Acreage to Acquire (+/-)	Federal Share	Non-Federal Share	Estimated Total Value of Interest
Fiscal Year 2002 Grants								
2002	AL	Baldwin	City of Daphne	Village Point	51	\$498,100	\$498,100	\$996,200
2002	CA	Monterey	Elkhorn Slough Foundation	Elkhorn Slough	356	\$498,100	\$498,100	\$996,200
2002	CA	Orange	Transportation Corridor Agencies	Orange County	TBD	\$348,700	\$348,700	\$697,400
2002	CA	Marin	The Bay Institute of San Francisco	San Pablo Bay	706	\$348,700	\$348,700	\$697,400
2002	CT	Fairfield	City of Stamford	Stamford Mill	1	\$348,700	\$348,700	\$697,400
2002	LA	St. Tammany Parish	St. Tammany Parish	Camp Salmen	106	\$224,100	\$225,000	\$449,100
2002	MA	Hillsborough	Town of Manchester, City of Gloucester	Surf Park	2	\$348,700	\$348,700	\$697,400
2002	MD	Worcester	Worcester County	Holly Grove Swamp	TBD	\$348,700	\$348,700	\$697,400
2002	MI	Wayne	Wayne County	Detroit River- Wyandot/ Chrysler	44	\$996,200	\$1,003,800	\$2,000,000
2002	MS	Harrison	Mississippi Secretary of State	Deer Island	674	\$3,785,000	\$3,785,000	\$7,570,000
2002	NJ	Bergen, others	New Jersey Meadowlands Commission	Hackensack	TBD	\$1,195,400	\$1,195,400	\$2,390,800
2002	NJ	TBD	NJ Coastal Program	NY/NJ Partnership	TBD	\$747,100	\$747,100	\$1,494,200
2002	NY	South Bronx	Bronx Alliance	River Lower Bronx River	TBD	\$1,494,000	\$1,494,000	\$2,988,000

2002	NY	Bronx	The Community Development Corporation	Point South River	Bronx East	5.5	\$996,200	\$996,200	\$1,992,400
2002	NY	Nassau	Town of Hempstead	Hempstead Harbor		4	\$348,700	\$1,610,414	\$1,959,114
2002	NY	Monroe	Monroe County	Lake Ontario		35	\$348,700	\$348,700	\$697,400
2002	NY	State Island	NY Dept. of Environmental Conservation	NY/NJ Partnership		TBD	\$747,100	\$747,100	\$1,494,200
2002	RI	Kent	City of Warwick	Warwick		26	\$348,700	\$348,700	\$796,400
2002	VA	Stafford	VA Dept. of Conservation & Recreation	Widewater Peninsula		1100	\$224,100	\$224,100	\$448,200
2002	VA	Gloucester	VA Institute of Marine Science	Taskinas Creek		45	\$273,900	\$273,900	\$547,800
2002	WA	Kitsap	Kitsap Parks and Recreation	Nick's Lagoon at Seabeck		34.5	\$498,100	\$498,100	\$996,200
2002	WI	Douglas	City of Superior	Lake Superior		TBD	\$796,200	\$796,200	\$1,592,400
Totals									
Fiscal Year 2003 Grants									
2003	CA	Orange	Transportation Corridor Agencies	South Orange Natural Community2		TBD	\$1,987,800	\$1,987,800	\$3,975,600
2003	CA	San Luis Obispo	CA Dept. of Fish & Game	Morro Bay Dunes		32	\$496,700	\$496,700	\$993,400
2003	CT	Fairfield	City of Stamford	Mill River2		1	\$994,000	\$994,000	\$1,988,000
2003	HI	Maui	County of Maui	Mu'olea Point		70	\$2,011,800	\$2,011,800	\$4,023,600
2003	LA	St. Tammany Parish	St. Tammany Parish	Camp Salmen2		106	\$1,341,800	\$1,341,800	\$2,683,600
2003	MN	Lake	City of Two Harbors	Lighthouse Point		up to 52	\$397,400	\$397,400	\$794,800

2003	MS	Harrison	MS Secretary of State	Deer Island Phase II	2 - 460+	\$2,195,100	\$2,195,100	\$4,390,200
2003	NH	Rockingham	City of Portsmouth	Sagamore Creek Headland	10	\$1,987,000	\$1,987,000	\$3,974,000
2003	NJ	Bergen & others	N.J. Meadowlands Commission	Meadowlands2	TBD	\$2,983,400	\$2,983,400	\$5,966,800
2003	NY	Staten Island	NY Dept. of Environmental Conservation	Staten Island Harbor Program	TBD	\$1,934,000	\$1,934,000	\$3,868,000
2003	OH	Ottawa	Ohio Dept. of Natural Resources	North Bass Island	127 (total 591)	\$1,987,000	\$1,987,000	
2003	OH	Erie	Erie Metro Parks	East Sandusky Bay	155	\$2,483,700	\$2,483,700	\$4,967,000
2003	OR	Tillamook	Tillamook County	Tillamook Bay	355	\$596,000	\$596,000	\$1,192,200
2003	RI	Warwick	City of Warwick	Rocky Point Park2	26	\$1,888,000	\$1,888,400	\$4,474,200
2003	SC	Berkeley	SC Dept. of Natural Resources	Bonneau Ferry	10,697	\$9,935,000	In-kind	
2003	SC	Berkeley	SC Dept. of Natural Resources	Cooper River, West Branch	10,697	\$1,987,000	In-kind	
2003	WA	Kitsap	Kitsap County Parks & Recreation Dept.	Laughlin Cove	20	\$199,000	\$199,900	\$399,800
2003	WA	Island	Island County	Deer Lagoon	379	\$596,100	\$596,100	\$1,192,200
Totals								
Fiscal Year 2004 Grants								
2004	AL	Baldwin	City of Orange Beach	Robinson Island	12.5	\$989,477	\$3,310,523	\$4,300,000
2004	CA	Sacramento	Elkhorn NERR	Slough Elkhorn Slough/Moss Landing	1175	\$1,484,216	\$1,484,216	\$2,968,432
2004	CA	Marin	CA Coastal	San Pablo Bay	TBD	\$989,477	\$989,477	\$1,978,954

			Conservancy						
2004	CA	Santa Cruz	CA Dept of Parks and Recreation	Sand Hill Bluff	147	\$1,978,955	\$1,978,955	\$3,957,910	
2004	CA	Orange	Foothill/Eastern Transportation Corridor Agency	South Orange Natural Community	TBD	\$494,739	\$494,739	\$989,478	
2004	CA	Santa Barbara	City of Goleta	Goleta	137	\$791,582	\$791,582	\$19,750,000	
2004	CT	Fairfield	Stamford	Mill River	0.26	\$197,896	\$197,896	\$395,792	
2004	CT	Westbrook	Westbrook	Salt Island Overlook	7	\$296,843	\$303,157	\$600,000	
2004	HI	Maui	Maui Coastal Land Trust	Coastal Lands Waihe'e Preserve	277	\$989,477	\$989,477	\$4,800.00	
2004	HI	Honolulu	State of Hawaii	Coastal Lands Pupukeya Paumalu	1129	\$1,978,955	\$1,978,955	\$12,900,000	
2004	LA	St. Tammany Parish	St. Tammany Parish	Camp Salmen3	106	\$692,615	In-kind		
2004	LA	Jefferson	City Westwego	Westwego	132	\$1,583,164	\$1,583,164	\$3,166,328	
2004	MA	Barnstable	Town of Harwich	Monomoy River	42.5	\$1,675,000	\$1,675,000	\$5,841,512	
2004	MD	TBD	State of Maryland	Chesapeake, Eastern Shore, Glatfelter properties	TBD	\$5,936,700			
2004	ME	Cumberland	Town of Yarmouth	Royal River	TBD	\$1,583,164	\$1,583,164	\$3,166,328	
2004	MI	Allegan	City of Saugatuck	Saugatuck Dunes	161	\$2,473,694	\$2,473,694	\$38,000,000	
2004	MS	Hinds	Mississippi Secretary of State	Mississippi Coastal Preserve System	TBD	\$1,978,955	\$1,978,155	\$3,957,910	
2004	NH	Rockingham	Town of Rye	Seacoast, Massacre Marsh	23	\$1,484,216	\$1,484,216	\$2,968,432	
2004	NH	Rockingham	Town of Hampton	Seacoast, Hurd Farm	151	\$494,739	\$494,739	\$1,968,475	
2004	NJ	Mercer	NJ Dept. of Environmental Protection	Barnegat Bay	800+	\$1,978,955	\$1,988,175	\$3,957,910	
2004	NJ	Monmouth	Borough of Rumson	Gunning Island	20.8	\$1,484,216	\$1,484,216	\$2,988,432	
2004	NY	Suffolk	Town of East Hampton	East Hampton	122.8	\$989,477	\$989,477	\$1,978,954	
2004	NY	Nassau	Town of North Hempstead	North Hempstead	3.17	\$494,739	\$494,739	\$989,478	
2004	OH	Franklin	State of Ohio	Bass Island	TBD	\$2,968,432	\$2,968,432	\$5,936,864	
2004	OH	Erie	Erie Metroparks	Kelly's Island	TBD	\$197,890	\$197,890	\$395,780	
2004	OH	Lake	Lake Metroparks	Grand River	125-200	\$989,477	\$989,477	\$1,978,954	

2004	OH	Cuyahoga	City of Cleveland	Lake Shoreline Basin Park)	Erie (Canal	21	\$2,968,432	\$2,968,432	\$5,936,864
2004	RI	Newport	Norman Sanctuary Trust	Bird	Third Beach	23	\$742,108	\$742,108	\$3,700,000
2004	TX	Harris	Harris County		Buffalo Bend	10	\$692,634	\$692,634	\$1,385,268
2004	TX	Galveston	Galveston County		Starvation Cove	50	\$593,687	\$593,687	\$1,187,374
2004	VA	TBD	VA Program	Coastal	Dragon's Run	TBD	\$989,450		\$989,450
2004	VA	TBD	VA Program	Coastal	Potomac Watershed/ Above Washington	TBD	\$2,968,350		\$2,968,350
2004	WA	Kitsap	Bainbridge Park and Recreation District	Island and	Pritchard Park Phase I	18	\$1,978,955	\$2,921,045	\$4,900,000
2004	WA	King	King County		Mauvy Island	275+	\$1,978,955	\$1,978,955	\$4,900,000
2004	WI	Bayfield	WI Program	Coastal	Saxine Creek/Bibon Swamp	TBD	\$742,108	\$742,108	\$1,484,216
Totals									
Special Fiscal Year 2004 Funding Under the Fish and Wildlife Coordination Act Authorities									
2004	NH				Great Partnership	Bay	\$6,000,000	FWCA No required	Funding match
2004	SC				Bonneau Ferry		\$16,750,000	FWCA No required	Funding match
Totals							\$22,750,000		
Notes									
1. Acreage is early estimate and subject to change									
2. Indicates multi-year funding authorizations									
3. Applications for FY 2004 not available. This reflects authorizations by Congress for these projects.									